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NAS PENSACOLA
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TECHNICAL MEMORANDUM REGARDING SOIL INVESTIGATION PRELIMINARY SITE
CHARACTERIZATION RESULTS SUMMARY FOR BUILDING 3380 NAS PENSACOLA FL
8/19/1994
ENSAFE ALLEN AND HOSCHALL

TECHNICAL MEMORANDUM

TO: Bechtel Environmental, Inc.

FROM: EnSafe/Allen & Hoshall

DATE: August 19, 1994

SUBJECT: NAS Pensacola [REDACTED] Soil Investigation
Preliminary Site Characterization Results Summary

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List of Acronyms and Abbreviations

ABB	Asea Brown Boveri Environmental Services, Inc.
bls	Below Land Surface
BRAC	Base Realignment and Closure Act
CLP	Contract Laboratory Program
CSAP	Comprehensive Sampling and Analysis Plan
DOD	Department of Defense
E/A&H	EnSafe/Allen & Hoshall
FDEP	Florida Department of Environmental Protection
IWTP	Industrial Wastewater Treatment Plant
NAS	Naval Air Station
PCBs	Polychlorinated Biphenyls
PRGs	Preliminary Remediation Goals
QA	Quality Assurance
QC	Quality Control
SAPs	Sampling and Analysis Plans
SVOCs	Semivolatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
TRPHs	Total Recoverable Petroleum Hydrocarbons
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

Site 36 is part of Category VIII at Naval Air Station (NAS) Pensacola (Figure 1-1). Originally, it included the entire Industrial Waste Treatment Plant (IWTP) sewer line in the southeast part of the base. However due to the Base Realignment and Closure Act (BRAC) activities, the sewer line in the Chevalier Field area has been investigated first. Because it is close to the sewer line, an area possibly containing solvents near Building 3380 was also included in this investigation. Solvents were identified in the groundwater during a contamination assessment of a known leaking underground storage tank (UST) site. The site, which is directly northeast of Building 2662 and the area near Building 3380, was investigated by ABB Environmental Services, Inc. (ABB), of Tallahassee, Florida (ABB 1994).

This technical memorandum will present the methods and preliminary investigative results EnSafe/Allen & Hoshall (E/A&H) generated during the Building 3380 soil investigation conducted in June and July 1994. The Building 3380 soil investigation was performed in accordance with the Final Comprehensive Sampling and Analysis Plan (CSAP) for NAS Pensacola (E/A&H 1994). Pursuant to the results of this soil investigation, an area of soil to be removed and a preferred treatment for the soil are recommended.

To define the areal limit of the soil to be removed, analytical results from the investigation of Building 3380 area were compared to human health risk-based preliminary remediation goals (PRGs). Soil sample results were compared to the United States Environmental Protection Agency's (USEPA) Region III Risk-Based-Concentration tables for residential soil (January 7, 1994), and the Florida Department of Environmental Protection (FDEP) Cleanup Goals for Department of Defense (DOD) sites, child resident scenario (February 14, 1994). Based on these comparisons, conclusions and recommendations for further action are outlined. These PRGs have been included in Appendix A.

2.0 SITE DESCRIPTION AND HISTORY

From January 1992 to March 1994 a contamination assessment was performed by ABB at Site 2662W, the former site of a 1,000-gallon UST near Building 2662 in the southeast part of Chevalier Field. The contamination assessment identified two distinct areas of contamination near Building 2662. The first, north of Building 2662, appears to have resulted from the leaky UST under investigation and other activities in that area. The second, southeast of Building 2662 and near Building 3380, does not appear to have been caused by the leaky UST. Additionally, chlorinated compounds were detected in groundwater north and east of Building 3380 (ABB 1994).

During ABB's contamination assessment, 95 soil borings were advanced and 52 permanent and 15 temporary monitoring wells were installed at the site (Site 2662W and 3380 Solvent Area). Benzene, ethylbenzene, toluene, xylene, acenaphthene, fluorene, naphthalene, total recoverable petroleum hydrocarbons, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, vinyl chloride, and tetrachloroethene were identified in groundwater samples collected near Building 3380.

This building, which is 180 feet southeast of Building 2662, was used until July 15, 1994 to store hazardous materials such as oils, paint, and other flammable liquids inside a fenced area and inside the building. The building was vacated on July 15 because of the pending construction activities. All materials inside the building and fenced area have been removed.

ABB identified several underground pipes as possible sources of contamination at the site. The IWTP sewer line approximately 100 feet west of Building 3380 is being investigated under the Site 36 Installation Restoration investigation. An industrial waste drainage trench near the edge of the helicopter maintenance and defueling area northwest of Building 2662 drains into an oil-

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water separator northeast of the building. An industrial waste line carries oil and floating liquid from the separator to IWTP manhole A-11-A which drains into the main IWTP sewer line. The water flows under baffles inside the separator and out through the spillway to the east into the marshy area northeast of Building 3380. A bilge water line along the east of Building 3380 transports oily wastewater from ships docked at NAS Pensacola.

As agreed by the Tier I Partnering Team, investigation of the chlorinated compound contamination in the area near Building 3380 has been transferred to the Installation Restoration Program. The area is included under the E/A&H Site 36 investigation because of the high concentrations of chlorinated compounds and because it is close to the IWTP sewer line.

3.0 METHODS

A Contaminant Source Survey was completed before field work began. The survey included reviewing available previous investigation reports, aerial photographs, maps, underground utility data, and interviews with NAS personnel. Survey results have been incorporated into Section 2, Site Description and History.

Field activities during June and July 1994 included completing soil borings and collecting soil samples to characterize contaminants that may be present in areas likely to be impacted by site activities. Full Target Analyte List/Target Compound List (TAL/TCL) analyses were performed by Pace Laboratories, Inc., of Hampton, New Hampshire, using Contract Laboratory Program (CLP) protocol. These analyses included:

- TCL volatile organic compounds (VOCs)
- TCL semivolatile organic compounds (SVOCs)
- TCL pesticides
- TCL polychlorinated biphenyls (PCBs)
- TAL metals (unfiltered groundwater)
- TCL cyanide

Decontamination

Field equipment was decontaminated following procedures described in Section 11 of the CSAP. All augering equipment was decontaminated before use at each sampling location, while sampling equipment coming in contact with the actual sample material was decontaminated before sample collection at any given location.

Soil Sampling

Soil samples in the Building 3380 area were collected with hand augers in accordance with Section 4.4 of the CSAP. Soil samples were collected continuously from the land surface to the water table at the following frequencies: 0 to 1 foot below land surface (bls), 1 to 3 feet bls, 3 to 5 feet bls, etc., until the water table was reached. Immediately upon collection, representative soil sample volumes were containerized for VOC analysis to avoid degassing. Samples for the remaining analyses were then homogenized as outlined in Section 4 of the CSAP. Sample depth, lithologic descriptions, and other pertinent information were recorded in boring logs or field logbooks during collection.

Quality Assurance/Quality Control Samples

Quality assurance/quality control (QA/QC) procedures were followed during the investigation, as outlined in Section 15 of the CSAP. These procedures included collecting equipment rinsate blank, trip blank, duplicate, matrix spike, and matrix spike duplicate samples. All samples were labeled, processed, packaged, and shipped as outlined in Section 12 of the CSAP.

Positioning Sample Locations

All sampling locations were located to an accuracy of \pm 2 millimeters with a global positioning system after sampling.

4.0 FIELD WORK AND ANALYTICAL RESULTS SUMMARY

4.1 Field Work Summary

During the Building 3380 area investigation, E/A&H advanced 13 soil borings and collected 19 soil samples. The depth-to-water varied from approximately 1 foot to 3 feet bls. In addition, one concrete sample was collected from the soil boring advanced inside Building 3380. Figure 4-1 shows the soil boring locations.

4.2 Analytical Results Summary

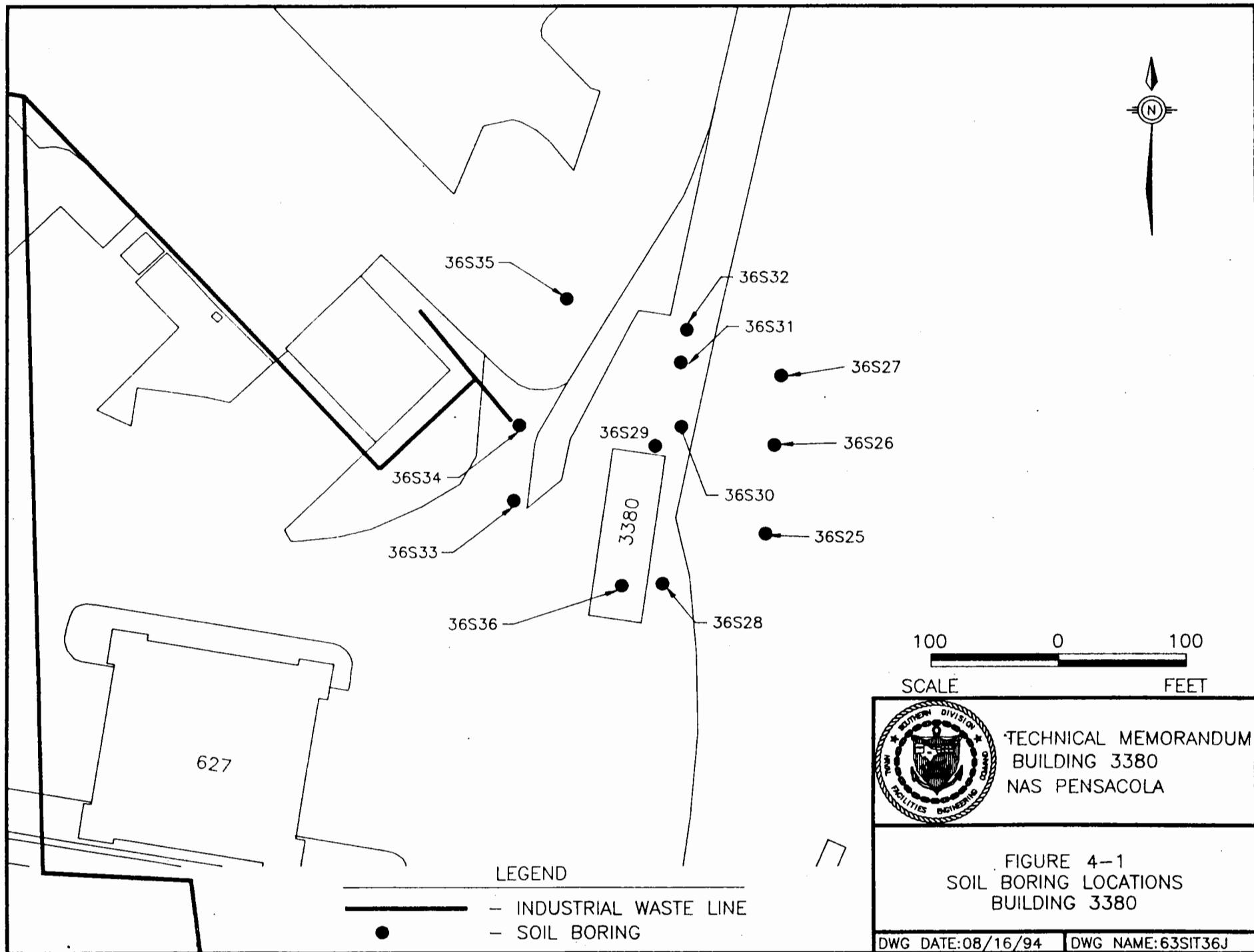
The results of the chemical analyses which were performed on the soil samples are presented in the following section. The detected concentrations in soil are summarized in Appendix B, and a database summary of all the analytical results is provided in Appendix C.

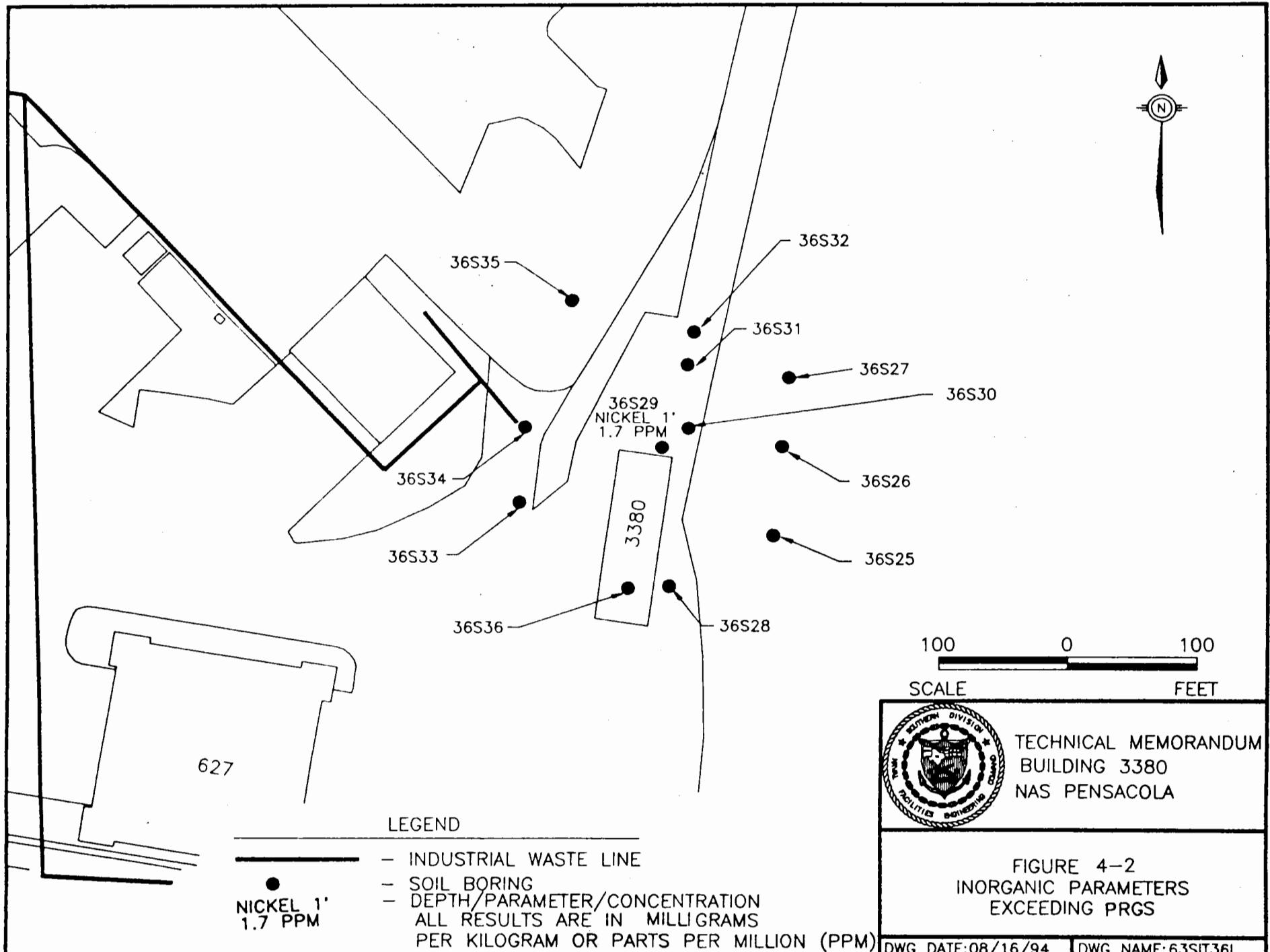
4.2.1 Inorganic Parameters

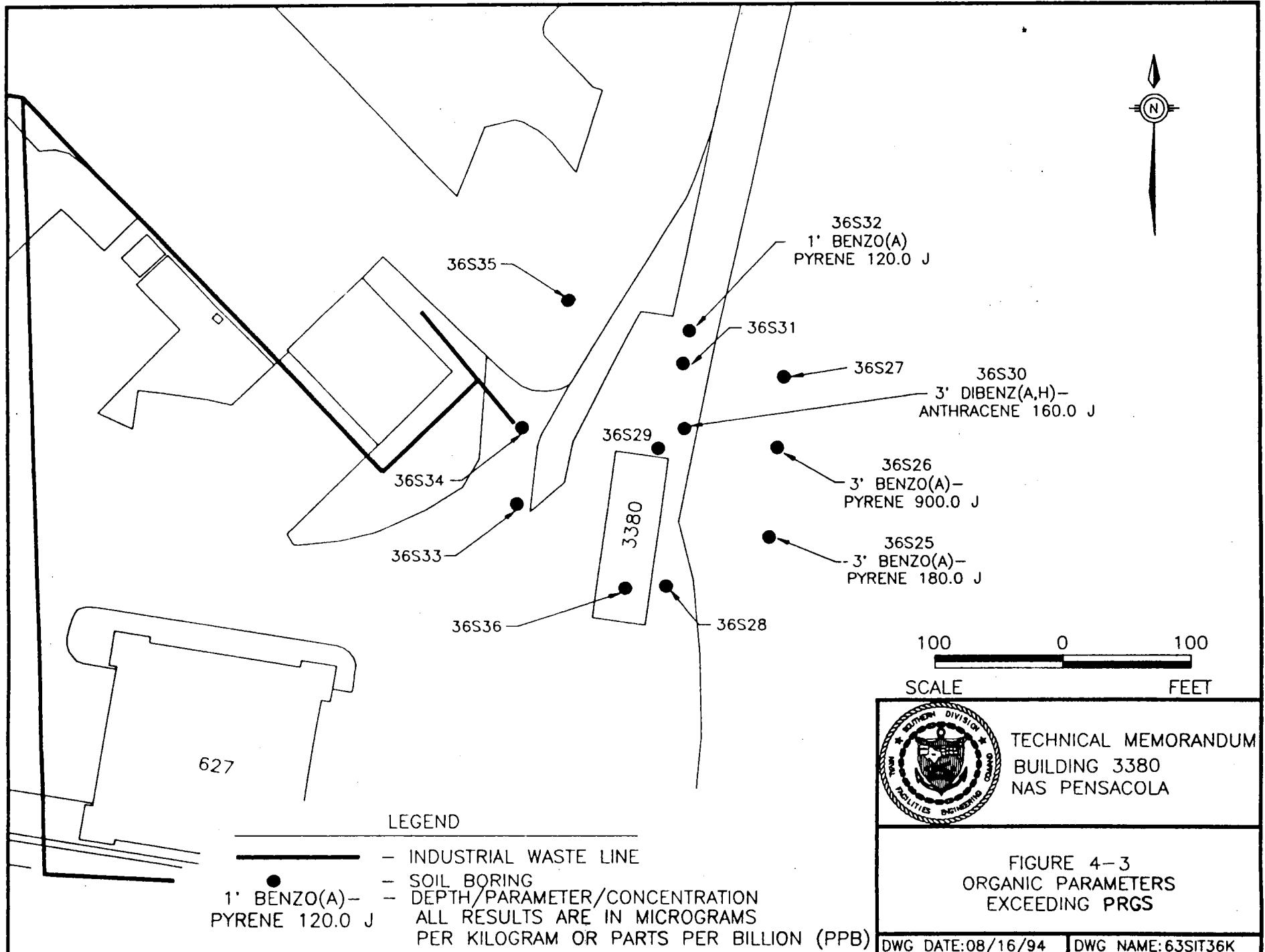
Nickel was detected in the 0 to 1' interval (17 ppm) at 36S29 at a concentration exceeding its PRG (1.01 ppm) and was the only inorganic parameter detected above a PRG. The detected concentration is below NAS Pensacola reference concentration of 6.38 ppm. Metals were widely detected at concentrations exceeding the established reference concentrations for NAS Pensacola (Appendix D), however they did not exceed their respective PRGs. The detected metals are summarized in Appendix B, and the inorganic parameters exceeding PRGs are shown on Figure 4-2.

4.2.2 Organic Parameters

The detected organic parameters are discussed below and are summarized in Appendix B. The detected concentrations of organic parameters exceeding PRGs are presented on Figure 4-3.







Volatile Organic Compounds

The only volatile detected was tetrachloroethene in the 0-1' interval (1,100 ppb) and 1-3' interval (10.0 ppb) at 36S29. The PRG of 12,000 ppb was not exceeded.

Semivolatile Organic Compounds

The following contaminants were detected in soil samples at concentrations exceeding their respective PRGs: benzo(a)pyrene and dibenz(a,h)anthracene. Benzo(a)pyrene was detected at 36S32 (120.0 ppb) from the 0 to 1' interval, at 36S26 (900.0 ppb) from the 1 to 3' interval, and at 36S25 (180.0 ppb) from the 1 to 3' interval. Dibenz(a,h)anthracene was detected at 36S30 (160.0 ppb) from the 1 to 3' interval. In addition, the following contaminants were detected at concentrations below the PRGs: phenanthrene, carbazole, fluoranthene, pyrene, chrysene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene and indeno(1,2,3cd)pyrene.

4.2.3 Pesticides and PCBs

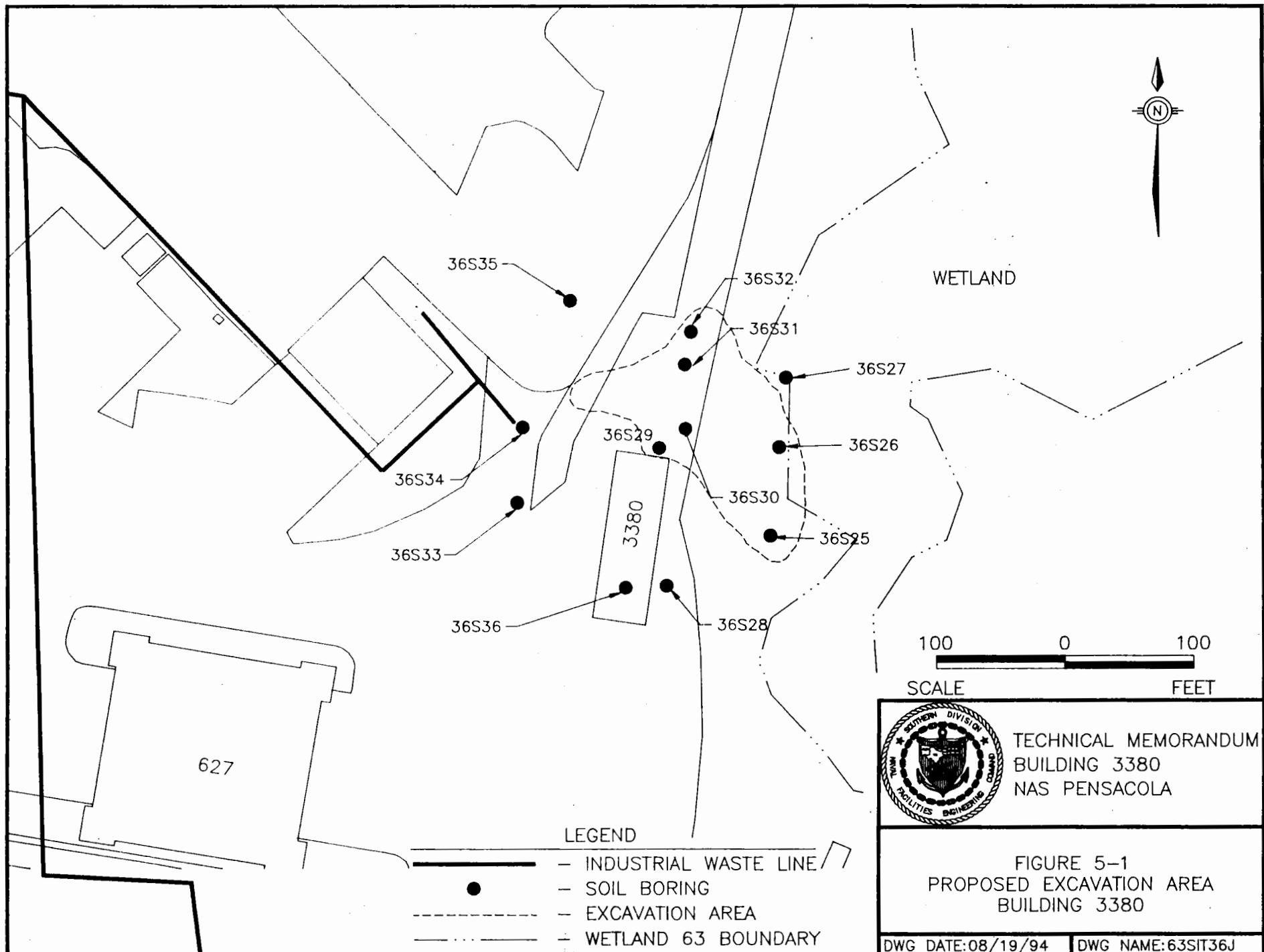
Pesticides and PCBs were detected in five soil samples. Aroclor 1260 was detected in 36S28 (12.0 ppb) in the 0 to 1' interval and in the 1 to 3' interval (13.0 ppb). Aroclor 1260 does not have a PRG. 4,4'-DDT was detected in 36S27 (3.2 ppb) in the 0 to 1' interval, in 36S32 (3.0 ppb) in the 0 to 1' interval, and 36S35 (5.0 ppb) in the 1 to 3' interval. None of the detected concentrations of 4,4'-DDT exceeded the PRG of 1,900 ppb.

5.0 CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER ACTION

During recent Partnering Meetings, the Parties have agreed that if the contaminants detected are above the agreed-upon PRGs, further delineation or CERCLA-response actions will be performed. Because time constraints prohibit additional delineation, it is recommended that a removal action at Building 3380 be performed on the area with greater than 50 ppm on the OVA identified by ABB in the Contamination Assessment Report (ABB 1994) and on the area of semivolatile and volatile contamination identified in this technical memorandum. Bechtel Environmental, Inc. will be performing a removal of petroleum contaminated soil at Building 2662 identified by ABB. In addition, ABB has obtained approval from FDEP to treat the petroleum-contaminated soil onsite with a low-temperature thermal desorption (LTTD) system. Because the removals of petroleum site 2662 and this site will take place consecutively and the technology will be effective on the semivolatile and volatile contaminants for the solvent area identified in this technical memorandum, it is recommended the LTTD system be used to treat the soil excavated from both the area identified by ABB and the area identified in this technical memorandum. The area to be excavated is presented in Figure 5-1. The criteria for cleanup are separated by the two areas and are discussed below.

Area Over 50 ppm

This soil on the western side of the removal area is considered excessively contaminated under the FDEP guidance. Because most of this area did not have detected concentrations of non-petroleum contaminants above the PRGs, this area will be remediated in accordance with FDEP UST guidance. The area is approximately 100 feet x 100 feet. The water table is approximately 2 to 3 feet bsl. Soil treatment criteria will be in accordance with Florida Administrative Code 17-775, Florida Thermal Treatment Facilities Regulations which is provided in Appendix E.



Semivolatile Area

The contaminants identified in this area on the eastern side of the excavation area are above the PRGs for benzo(a)pyrene and dibenz(a,h)anthracene. Although tetrachlorethene did not exceed the PRG, it will also be a determinant for the removal because it is a source for the volatiles detected by the OVA. The approximate area of excavation is 80 feet x 140 feet. The water table is approximately 1 to 3 feet bsl. The excavation will extend to the limits shown on Figure 5-1 and until the parameters are below their respective PRGs. The PRGs are provided in Appendix A.

A portable chromatograph or laboratory analysis for SW-846 PAHs with priority turnaround are the suggested methods for determining if additional soil removal is necessary beyond the limits shown. Posttreatment soil samples will be collected following the criteria presented in FAC 17-775. Verification sampling at the extent of the excavation will be performed by EnSafe/Allen & Hoshall. All pretreatment and posttreatment soil are to be handled in accordance with the criteria presented in Florida Administrative Code 17-775.

Wetland 63 is adjacent to the eastern extent of the excavation. The wetland is an important ecological resource and care must be taken to ensure the wetland is not damaged. Figure 5-1 shows the wetland boundary, and flagging is currently marking the wetland boundary at the site. If excavation within the wetland is necessary, a nationwide permit must be obtained from the U.S. Army Corp of Engineers if the facility does not currently have a permit.

6.0 REFERENCES

ABB, Inc. (1994). *Contamination Assessment Report, Building 2662W, Naval Air Station Pensacola, Florida.* ABB, Inc.: Tallahassee, Florida.

EnSafe/Allen & Hoshall. (1994). *Comprehensive Sampling and Analysis Plan for Naval Air Station Pensacola, Pensacola, Florida — Draft Final.* EnSafe/Allen & Hoshall: Memphis, Tennessee.

Florida Department of Environmental Protection. (1994). *Cleanup Goals for the Military Sites in Florida.* Florida Department of Environmental Protection: Tallahassee, Florida (July 5, 1994).

United States Environmental Protection Agency. (1994). *Risk-Based Concentration Table, First Quarter 1994.* United States Environmental Protection Agency: Philadelphia, Pennsylvania (January 7, 1994).

United States Environmental Protection Agency. (^{in press}). *Revised Lead Soils Guidance.* United States Environmental Protection Agency.

Appendix A
Preliminary Remediation Goals



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III

841 Chestnut Street

Philadelphia, Pennsylvania 19107

January 7, 1994

SUBJECT: Risk-Based Concentration Table, First Quarter 1994

FROM: Roy L. Smith, Ph.D., Senior Toxicologist
Technical Support Section (3HW13)

TO: RBC Table mailing list

Attached is the EPA Region III risk-based concentration table, which we have distributed quarterly to all interested parties since 1991. If you are not currently on the mailing list, but would like to be, please contact Anna Poulton (phone: 215-597-3179, fax: 215-597-9890) and give her your name, address, and phone and fax numbers.

The table contains reference doses and carcinogenic potency slopes (obtained from IRIS through January 1, 1994, HEAST through July 1993, OHEA-Cincinnati, and other EPA sources) for nearly 600 chemicals. These toxicity constants have been combined with "standard" exposure scenarios to calculate chemical concentrations corresponding to fixed levels of risk (*i.e.*, a hazard quotient of 1, or lifetime cancer risk of 10^{-6} , whichever occurs at a lower concentration) in water, air, fish tissue, and soil.

The Region III toxicologists use this table as a risk-based screen for Superfund sites, and as a desk reference for emergencies and requests for immediate information. The table also provides a useful benchmark for evaluating site investigation data and preliminary remediation goals. The table has no official status as either regulation or guidance, and should be used only as a predictor of generic single-contaminant health risk estimates. *The table is specifically not intended as (1) a stand-alone decision-making tool, (2) a substitute for EPA guidance for preparing baseline risk assessments, (3) a source of site-specific cleanup levels, or (4) a rule to determine if a waste is hazardous under RCRA.* In general, chemical concentrations above the levels in the table suggest a need for a closer look by a toxicologist, but should not be used as the sole basis for taking any action.

The toxicity information in the table has been assembled by hand, and (despite extensive checking and years of use) may contain errors. It's advisable to cross-check before relying on any numbers in the table. If you find any errors, please send me a note.

This issue of the table is printed in a new format, which was developed because it fits more information on each page, while (hopefully) retaining legibility. The table now includes the CAS number of each contaminant, which should reduce confusion about multi-named compounds. Also, each risk-based concentration is now accompanied by a footnote indicating its basis, whether carcinogenic or non-carcinogenic effects. Finally, all newly revised risk-based concentrations have been placed in shaded boxes for quick recognition, rather than summarized here.

I'd like to express my appreciation to all the users of the RBC Table who have contributed suggestions for improvements over the last three years. I hope your continued interest will help us make the table even better in the future. Have a great 1994!

Attachment

Risk-Based Concentration Table
Background Information

General: Separate carcinogenic and non-carcinogenic risk-based concentrations were calculated for each compound for each pathway. The concentration in the table is the lower of the two, rounded to two significant figures. The following terms and values were used in the calculations:

Exposure variables	Value	Name
1-General:		
Carcinogenic potency slope oral (kg-d/mg):	*	CPSo
Carcinogenic potency slope inhaled (kg-d/mg):	*	CPSi
Reference dose oral (mg/kg/d):	*	RfDo
Reference dose inhaled (mg/kg/d):	*	RfDi
Target cancer risk:	1e-06	TR
Target hazard quotient:	1	THQ
Body weight, adult (kg):	70	BWa
Body weight, age 1-6 (kg):	15	BWc
Averaging time carcinogens (d):	25550	ATc
Averaging time non-carcinogens (d):	ED*365	ATn
Inhalation, adult (m ³ /d):	20	IRAA
Inhalation, child (m ³ /d):	12	IRAc
Inhalation factor, age-adjusted (m ³ -y/kg-d):	11.66	IFAadj
Tap water ingestion, adult (L/d):	2	IRWa
Tap water ingestion, age 1-6 (L/d):	1	IRWc
Tap water ingestion factor, age-adjusted (L-y/kg-d):	1.09	IFWadj
Fish ingestion (g/d):	54	IRF
Soil ingestion, adult (mg/d):	100	IRSa
Soil ingestion, age 1-6 (mg/d):	200	IRS _c
Soil ingestion factor, age adjusted (mg-y/kg-d):	114.29	IFSadj
2-Residential		
Exposure frequency (d/y):	350	EFr
Exposure duration, total (y):	30	EDtot

Exposure variables	Value	Name
Exposure duration, age 1-6 (y):	6	EDc
Volatilization factor (L/m3):	0.5	VF
3-Occupational:		
Exposure frequency (d/y):	250	EFo
Exposure duration (y):	25	EDo
* = Contaminant-specific toxicity parameters		

The priority among sources of toxicological constants was as follows: (1) IRIS, (2) HEAST, (3) HEAST alternative method, (4) ECAO-Cincinnati, (5) withdrawn from IRIS, (6) withdrawn from HEAST, and (7) other EPA documents. Each source was used only if numbers from higher-priority sources were unavailable.

Algorithms:

1. Age-adjusted factors: Because contact rates with tap water, ambient air, and residential soil are different for children and adults, carcinogenic risks during the first 30 years of life were calculated using age-adjusted factors. These factors approximated the integrated exposure from birth until age 30 by combining contact rates, body weights, and exposure durations for two age groups - small children and adults. The age-adjusted factor for soil was obtained from RAGS IB; the others were developed by analogy.

a. Air inhalation ($[m^3 \cdot y]/[kg \cdot d]$):

$$IFA_{adj} = \frac{ED_c \cdot IRA_c}{BW_c} + \frac{(EDI_{tot} - ED_c) \cdot IRA_a}{BW_a}$$

b. Tap water ingestion ($[L \cdot y]/[kg \cdot d]$):

$$IFW_{adj} = \frac{ED_c \cdot IRW_c}{BW_c} + \frac{(EDI_{tot} - ED_c) \cdot IRW_a}{BW_a}$$

c. Soil ingestion ($[mg \cdot y]/[kg \cdot d]$):

$$IFS_{adj} = \frac{ED_c \cdot IRS_c}{BW_c} + \frac{(EDI_{tot} - ED_c) \cdot IRS_a}{BW_a}$$

2. Residential water use ($\mu\text{g/L}$). Volatilization terms were calculated only for compounds with "****" in the "VOC" column. Compounds having a Henry's Law constant greater than 10^3 were considered volatile. The list may be incomplete, but is unlikely to include false positives. The equations and the volatilization factor (VF, above) were obtained from RAGS IB. Oral potency slopes and reference doses were used for both oral and inhaled exposures for volatile compounds lacking inhalation values. Inhaled potency slopes were substituted for unavailable oral potency slopes only for volatile compounds; inhaled RfDs were substituted for unavailable oral RfDs for both volatile and non-volatile compounds.

a. Carcinogens: Calculations were based on combined childhood and adult exposure.

$$\frac{TR \cdot ATc \cdot 1000}{EFr \cdot ([VF \cdot IFAadj \cdot CPSi] + [IFWadj \cdot CPSo])}$$

b. Non-carcinogens: Calculations were based on adult exposure.

$$\frac{THQ \cdot BWa \cdot ATn \cdot 1000}{EFr \cdot EDtot \cdot \left(\frac{VF \cdot IRAa}{RfDi} + \frac{IRWa}{RfDo} \right)}$$

3. Air ($\mu\text{g/m}^3$). Oral potency slopes and references were used where inhalation values were not available.

a. Carcinogens: Calculations were based on combined childhood and adult exposure.

$$\frac{TR \cdot ATc \cdot 1000}{EFr \cdot IFAadj \cdot CPSi}$$

b. Non-carcinogens: Calculations were based on adult exposure.

$$\frac{THQ \cdot RfDi \cdot BWa \cdot ATn \cdot 1000}{EFr \cdot EDtot \cdot IRAa}$$

4. Fish (mg/kg):

a. Carcinogens: Calculations were based on adult exposure.

$$\frac{TR \cdot BWa \cdot ATc}{EFr \cdot EDtot \cdot \frac{IRF}{1000} \cdot CPSo}$$

b. Non-carcinogens: Calculations were based on adult exposure.

$$\frac{THQ \cdot RfDo \cdot BWa \cdot ATn}{EFr \cdot ED_{tot} \cdot \frac{IRF}{1000 \frac{kg}{m^3}}}$$

5. Soil commercial/industrial (mg/kg): The default exposure assumption that only 50% of incidental soil ingestion occurs at work has been omitted. Calculations were based on adult occupational exposure.

a. Carcinogens:

$$\frac{TR \cdot BWa \cdot ATc}{EFo \cdot EDo \cdot \frac{IRSa}{10^4 \frac{kg}{m^3}} \cdot CPSo}$$

b. Non-carcinogens:

$$\frac{THQ \cdot RfDo \cdot BWa \cdot ATn}{EFo \cdot EDo \cdot \frac{IRSa}{10^4 \frac{kg}{m^3}}}$$

6. Soil residential (mg/kg):

a. Carcinogens: Calculations were based on combined childhood and adult exposure.

$$\frac{TR \cdot ATc}{EFr \cdot \frac{IFSadj}{10^4 \frac{kg}{m^3}} \cdot CPSo}$$

b. Non-carcinogens: Calculations were based on childhood exposure only.

$$\frac{THQ \cdot RfDo \cdot BWc \cdot ATn}{EFr \cdot EDc \cdot \frac{IRSc}{10^4 \frac{kg}{m^3}}}$$

Sources: i=IRIS h=HEAST s=HEAST st=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: $c =$ carcinogenic effects $n =$ noncarcinogenic effects

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg		µg/L	µg/m³	mg/kg	mg/kg	mg/kg
Acephate	30560191	4.00E-03 i		8.70E-03 i			7.7 o	0.72 o	0.36 o	330 o	73 o
Acetaldehyde	75070		2.57E-03 i		7.70E-03 i		94 n	0.81 o			
Acetochlor	34256821	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Acetone	67641	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Acetone cyanohydrin	75865	7.00E-02 n	2.86E-03 n				2600 n	10 n	95 n	72000 n	5500 n
Acetonitrile	75078	6.00E-03 i	1.43E-02 n				220 n	52 n	8.1 n	6100 n	470 n
Acetophenone	98862	1.00E-01 i	5.71E-06 w			**	0.042 n	0.021 n	140 n	100000 n	7800 n
Aciduorsen	62476599	1.30E-02 i					470 n	47 n	18 n	13000 n	1000 n
Acrolein	107028	2.00E-02 n	5.71E-06 i				730 n	0.021 n	27 n	20000 n	1600 n
Acrylamide	79061	2.00E-04 i		4.50E+00 i	4.55E+00 i		0.015 o	0.0014 o	0.0007 o	0.64 o	0.14 o
Acrylic acid	79107	8.00E-02 i	8.57E-05 i				2900 n	0.31 n	110 n	82000 n	6300 n
Acrylonitrile	107131		5.71E-04 i	5.40E-01 i	2.38E-01 i		0.12 o	0.026 o	0.0058 o	5.3 o	1.2 o
Alachlor	15972608	1.00E-02 i		8.00E-02 n			0.84 o	0.078 o	0.039 o	36 o	6 o
Alar	1596845	1.50E-01 i					5500 n	550 n	200 n	150000 n	12000 n
Aldicarb	116063	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
Aldicarb sulfone	1646884	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
Aldrin	309002	3.00E-05 i		1.70E+01 i	1.71E+01 i		0.004 o	0.00007 o	0.00019 o	0.17 o	0.038 o
Allyl	74223646	2.50E-01 i					9100 n	910 n	340 n	260000 n	20000 n
Allyl alcohol	107186	5.00E-03 i					180 n	18 n	6.8 n	5100 n	390 n
Allyl chloride	107051	5.00E-02 w	2.86E-04 i				1800 n	1 n	68 n	51000 n	3900 n
Aluminum	7429905	2.90E+00 o					110000 n	11000 n	3900 n	1000000 n	230000 n
Aluminum phosphide	20859738	4.00E-04 i					15 n	1.5 n	0.54 n	410 n	31 n
Amdro	67485294	3.00E-04 i					11 n	1.1 n	0.41 n	310 n	23 n
Ametryn	834128	9.00E-03 i					330 n	33 n	12 n	9200 n	700 n
m-Aminophenol	591275	7.00E-02 n					2600 n	260 n	95 n	72000 n	5500 n
4-Aminopyridine	504245	2.00E-05 n					0.73 n	0.073 n	0.027 n	20 n	1.6 n
Amitraz	33089611	2.50E-03 i					91 n	9.1 n	3.4 n	2600 n	200 n
Ammonia	7664417		2.86E-02 i				1000 n	100 n			
Ammonium sulfamate	7777060	2.00E-01 i					7300 n	730 n	270 n	200000 n	16000 n
Aniline	62531		2.86E-04 i	5.70E-03 i			10 n	1 n	0.53 o	410 o	110 o
Antimony and compounds	7440160	4.00E-04 i					15 n	1.5 n	0.54 n	410 n	31 n
Antimony pentoxide	1314609	5.00E-04 n					18 n	1.8 n	0.68 n	510 n	39 n
Antimony potassium tartrate	304610	9.00E-04 n					33 n	3.3 n	1.2 n	920 n	70 n
Antimony tetroxide	1332316	4.00E-04 n					15 n	1.5 n	0.54 n	410 n	31 n
Antimony trioxide	1309644	4.00E-04 n					15 n	1.5 n	0.54 n	410 n	31 n
Apollo	74115245	1.30E-02 i					470 n	47 n	18 n	13000 n	1000 n
Aramite	140578	5.00E-02 n		2.50E-02 i	2.49E-02 i		2.7 o	0.25 o	0.13 o	110 o	26 o
Arsenic	7440182	3.00E-04 i					11 n	1.1 n	0.41 n	310 n	23 n
Arsenic (as carcinogen)	744002	3.00E-04		1.75E+00 i	1.51E+01 i		0.038 o	0.00041 o	0.0018 o	1.6 o	0.37 o
Assure	7657118	9.00E-01 i					330 n	33 n	12 n	9200 n	700 n
Asulam	1117711	9.00E-02 i					1840 n	180 n	68 n	51000 n	3800 n

Sources: i=IRIS h=HEAST s=HEAST ab. x=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects.

Contaminant	CAS	RfDo	RfDI	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg*d/mg	kg*d/mg	µg/L	µg/m³	mg/kg	mg/kg	mg/kg	mg/kg
Avermectin B1	65195553	4.00E-04 i					15 n	1.5 n	0.54 n	410 n	31 n
Azobenzene	103333			1.10E-01 i	1.06E-01 i		0.61 o	0.058 o	0.029 o	26 o	5.8 c
Barium and compounds	7440393	7.00E-02 i	1.43E-04 h				2600 n	0.52 n	95 n	72000 n	5500 n
Baygon	114261	4.00E-03 i					150 n	15 n	5.4 n	4100 n	310 n
Bayleton	43121433	3.00E-02 i					1100 n	110 n	41 n	31000 n	2300 n
Baythroid	68399375	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
Benefin	1861401	3.00E-01 i					11000 n	1100 n	410 n	310000 n	23000 n
Benomyl	17804352	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Bentazon	25057890	2.50E-03 i					91 n	9.1 n	3.4 n	2600 n	200 n
Benzaldehyde	100527	1.00E-01 i		..			610 n	370 n	140 n	100000 n	7800 n
Benzene	71412		1.43E-04 o	2.90E-02 i	2.90E-02 i	***	0.36 o	0.22 o	0.11 o	99 c	22 c
Benzidine	92875	3.00E-03 i		2.30E+02 i	2.35E+02 i		0.00029 o	0.000027 o	0.000014 o	0.012 o	0.0028 c
Benzoic acid	65890	4.00E+00 i					150000 n	15000 n	5400 n	1000000 n	310000 n
Benzotrichloride	98077			1.30E+01 i			0.0052 o	0.00048 o	0.00024 o	0.22 c	0.049 c
Benzyl alcohol	100516	3.00E-01 h					11000 n	1100 n	410 n	310000 n	23000 n
Benzyl chloride	100447			1.70E-01 i		***	0.062 o	0.037 o	0.019 o	17 o	3.8 c
Beryllium and compounds	7440417	5.00E-03 i		4.30E+00 i	8.40E+00 i		0.016 o	0.00075 o	0.00073 o	0.67 c	0.15 c
Bidrin	141662	1.00E-04 i					3.7 n	0.37 n	0.14 n	100 n	7.8 n
Biphen thrin (Talstar)	82657043	1.50E-02 i					550 n	55 n	20 n	15000 n	1200 n
1,1-Biphenyl	92524	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Bis(2-chloroethyl)ether	111444			1.10E+00 i	1.16E+00 i	***	0.0092 o	0.0054 o	0.0029 o	2.6 o	0.58 c
Bis(2-chloroisopropyl)ether	39638329	4.00E-02 i		7.00E-02 h	3.50E-02 h	***	0.26 o	0.18 o	0.045 o	41 c	9.1 c
Bis(chloromethyl)ether	542881			2.20E+02 i	2.17E+02 i	***	0.000049 o	0.000029 o	0.000014 o	0.013 o	0.0029 c
Bis(2-chloro-1-methylethyl)ether				7.00E-02 w	7.00E-02 w		0.96 o	0.089 o	0.045 o	41 o	9.1 c
Bis(2-ethylhexyl)phthalate (DEHP)	117817	2.00E-02 i		1.40E-02 i			4.8 o	0.45 o	0.23 o	200 o	46 c
Bisphenol A	80057	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Boron (and borates)	7440428	9.00E-02 i	5.71E-03 h				3300 n	21 n	120 n	92000 n	7000 n
Boron trifluoride	7617072		2.00E-04 h				7.3 n	0.73 n			
Bromodichloromethane	75274	2.00E-02 i		6.20E-02 i		***	0.17 o	0.1 o	0.051 o	46 o	10 c
Bromoethene	5936112				1.10E-01 h	***	0.096 o	0.057 o			
Bromoform (tribromomethane)	75252	2.00E-02 i		7.90E-03 i	3.85E-03 i	***	2.4 o	1.6 o	0.4 o	360 o	81 c
Bromomethane	74839	1.40E-03 i	1.43E-03 i			***	8.7 n	52 n	1.9 n	1400 n	110 n
4-Bromophenyl phenyl ether	101553	5.80E-02 o					2100 n	210 n	78 n	59000 n	4500 n
Bromophos	2104963	5.00E-03 h					180 n	18 n	6.8 n	5100 n	390 n
Bromoxynil	1689845	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Bromoxynil octanoate	1689992	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
1,3-Butadiene	106990				9.80E-01 i	***	0.011 o	0.0064 o			
1-Butanol	71363	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Butyl benzyl phthalate	85687	2.00E-01 i					7300 n	730 n	270 n	200000 n	16000 n
Butylate	2008415	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
sec-Butyl -ene	135988	1.00E-02 o				***	61 n	37 n	14 n	10 ⁶	780 n
tert-Butyl -ene	104518	1.00E-02 o				***	61 n	37 n	14 n	10 ⁶	780 n

Sources: I=IRIS h=HEAST s=HEAST at, x=W/D from IRIS r=W/D from HEAST c=EPA - ECAO o=Other EPA docs.

Basis of RBC: $s =$ arc/inorganic effects; $n =$ organic/inorganic effects

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg	C	µg/L	µg/m³	mg/kg	mg/kg	mg/kg
Butylphthalyl butylglycolate	85701	1.00E+00 /					37000 n	3700 n	1400 n	1000000 n	78000 n
Cacodylic acid	75605	3.00E-03 n					110 n	11 n	4.1 n	3100 n	230 n
Cadmium and compounds	7440439	5.00E-04 /			6.30E+00 /		18 n	0.00099 c	0.68 n	510 n	39 n
Caprolactam	105602	5.00E-01 /					18000 n	1800 n	680 n	510000 n	39000 n
Captisol	2429061	2.00E-03 /		8.60E-03 n			7.8 e	0.73 e	0.37 e	330 e	74 e
Captan	133062	1.30E-01 /		3.50E-03 n			19 e	1.8 e	0.9 e	820 e	180 e
Carbamyl	63252	1.00E-01 /					3700 n	370 n	140 n	100000 n	7800 n
Carbazole	86748			2.00E-02 n			3.4 e	0.31 e	0.16 e	140 e	32 e
Carbofuran	1463662	5.00E-03 /					180 n	18 n	6.8 n	5100 n	390 n
Carbon disulfide	75190	1.00E-01 /	2.86E-03 n		...		21 n	10 n	140 n	100000 n	7800 n
Carbon tetrachloride	56235	7.00E-04 /	5.71E-04 e	1.30E-01 /	5.25E-02 /	...	0.16 e	0.12 e	0.024 e	22 e	4.9 e
Carbosulfan	55285148	1.00E-02 /					370 n	37 n	14 n	10000 n	780 n
Carboxin	5234684	1.00E-01 /					3700 n	370 n	140 n	100000 n	7800 n
Chloral	75876	2.00E-03 /					73 n	7.3 n	2.7 n	2000 n	160 n
Chloramben	133904	1.50E-02 /					550 n	55 n	20 n	15000 n	1200 n
Chloranil	118752			4.03E-01 n			0.17 e	0.016 e	0.0078 e	7.1 e	1.6 e
Chlordane	57749	6.00E-05 /		1.30E+00 /	1.29E+00 /		0.052 e	0.0049 e	0.0024 e	2.2 e	0.49 e
Chlorimuron-ethyl	90982324	2.00E-02 /					730 n	73 n	27 n	20000 n	1600 n
Chlorine dioxide	10049044		5.71E-05 /				2.1 n	0.21 n			
Chloroacetaldehyde	107200	6.90E-03 e					250 n	25 n	9.3 n	7100 n	540 n
Chloroacetic acid	79118	2.00E-03 n					73 n	7.3 n	2.7 n	2000 n	160 n
2-Chloroacetophenone	532274		8.57E-06 /				0.31 n	0.031 n			
4-Chloroaniline	106478	4.00E-03 /					150 n	15 n	5.4 n	4100 n	310 n
Chlorobenzene	108907	2.00E-02 /	5.71E-03 n		...		39 n	21 n	27 n	20000 n	1600 n
Chlorobenzilate	510156	2.00E-02 /		2.70E-01 n	2.70E-01 n		0.25 e	0.023 e	0.012 e	11 e	2.4 e
p-Chlorobenzoic acid	74113	2.00E-01 n					7300 n	730 n	270 n	200000 n	16000 n
4-Chlorobenzotrifluoride	98546	2.00E-02 n					730 n	73 n	27 n	20000 n	1600 n
2-Chloro-1,3-butadiene	126918	2.00E-02 n	2.00E-03 n		...		14 n	7.3 n	27 n	20000 n	1600 n
1-Chlorobutane	109693	4.00E-01 n			...		2400 n	1500 n	540 n	410000 n	31000 n
Chlorodifluoromethane	75456		1.41e+01 /				87000 n	52000 n			
Chloroethane	75403	2.00E-02 e	2.86E+00 /		...		710 n	10000 n	27 n	20000 n	1600 n
2-Chloroethyl vinyl ether	110758	2.50E-02 e			...		150 n	91 n	34 n	26000 n	2000 n
Chloroform	67663	1.00E-02 /		6.10E-03 /	8.05E-02 /	...	0.15 e	0.078 e	0.52 e	470 e	100 e
Chloromethane	74873			1.30E-02 n	6.30E-03 n	...	1.4 e	0.99 e	0.24 e	220 e	49 e
4-Chloro-2,2-methylaniline hydrochloride	3169933			4.60E-01 n			0.15 e	0.014 e	0.0069 e	6.2 e	1.4 e
4-Chloro-2-methylaniline	95692			5.80E-01 n			0.12 e	0.011 e	0.0054 e	4.9 e	1.1 e
beta-Chloronaphthalene	91587	8.00E-02 /					2900 n	290 n	110 n	82000 n	6300 n
o-Chloronitrobenzene	88733			2.50E-02 n		...	0.42 e	0.25 e	0.13 e	110 e	26 e
p-Chloronitrobenzene	121733			1.80E-02 n		...	0.59 e	0.35 e	0.18 e	160 e	35 e
2-Chlorophenol	95578	5.00E-03 /			...		180 n	18 n	6.8 n	5100 n	390 n
2-Chloropropane	75296		2.86E-02 n		...		170 n	100 n			

Sources: I=IRIS h=HEAST a=HEAST ab=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects

Contaminant	CAS	RfDo	RfDI	CPSo	CPSI	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg	C	µg/L	µg/m³	mg/kg	mg/kg	mg/kg
o-Chlorotoluene	95498	2.00E-02 i				---	120 n	73 n	27 n	20000 n	1600 n
Chlorpropham	101213	2.00E-01 i					7300 n	730 n	270 n	200000 n	16000 n
Chlorpyrifos	2921882	3.00E-03 i					110 n	11 n	4.1 n	3100 n	230 n
Chlorpyrifos-methyl	5598130	1.00E-02 h					370 n	37 n	14 n	10000 n	780 n
Chlorsulfuron	64902723	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Chlothiophos	60238564	8.00E-04 h					29 n	2.9 n	1.1 n	820 n	63 n
Chromium III and compounds	16065831	1.00E+00 i	5.71E-07 w				37000 n	0.0021 n	1400 n	1000000 n	78000 n
Chromium VI and compounds	7440473	5.00E-03 i				4.20E+01 i	180 n	0.00015 o	6.8 n	5100 n	390 n
Coal tar	8001589					2.20E+00 w		0.0028 o			
Coke Oven Emissions	8007452					2.17E+00 i		0.0029 o			
Copper and compounds	7440504	3.71E-02 h					1400 n	140 n	50 n	38000 n	2900 n
Crotonaldehyde	121739	1.00E-02 w				1.90E+00 h	1.90E+00 w	0.035 o	0.0033 o	0.0017 o	1.5 o
Cumene	98828	4.00E-02 i	2.57E-03 h				1500 n	9.4 n	54 n	41000 n	3100 n
Cyanides:											
Barium cyanide	542621	1.00E-01 h					3700 n	370 n	140 n	100000 n	7800 n
Calcium cyanide	592018	4.00E-02 i					1500 n	150 n	54 n	41000 n	3100 n
Copper cyanide	544923	5.00E-03 i					180 n	18 n	6.8 n	5100 n	390 n
Cyanazine	21725462	2.00E-03 h				8.40E-01 h		0.08 o	0.0075 o	0.0038 o	3.4 o
Cyanogen	460195	4.00E-02 i					1500 n	150 n	54 n	41000 n	3100 n
Cyanogen bromide	506683	9.00E-02 i					3300 n	330 n	120 n	92000 n	7000 n
Cyanogen chloride	506774	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Free cyanide	57125	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Hydrogen cyanide	74908	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Potassium cyanide	151908	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Potassium silver cyanide	506616	2.00E-01 i					7300 n	730 n	270 n	200000 n	16000 n
Silver cyanide	506649	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Sodium cyanide	143339	4.00E-02 i					1500 n	150 n	54 n	41000 n	3100 n
Zinc cyanide	557211	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Cydohexanone	108941	5.00E+00 i				---	30000 n	18000 n	6800 n	1000000 n	390000 n
Cydohexamine	108918	2.00E-01 i					7300 n	730 n	270 n	200000 n	16000 n
Cyhalothrin/Karate	68085858	5.00E-03 i					180 n	18 n	6.8 n	5100 n	390 n
Cypermethrin	52315078	1.00E-02 i					370 n	37 n	14 n	10000 n	780 n
Cyromazine	66215278	7.50E-03 i					270 n	27 n	10 n	7700 n	590 n
Dacthal	1861321	5.00E-01 i					18000 n	1800 n	680 n	510000 n	39000 n
Dalapon	75990	3.00E-02 i					1100 n	110 n	41 n	31000 n	2300 n
Danitol	39515418	5.00E-04 w					18 n	1.8 n	0.68 n	510 n	39 n
DDD	72548		2.40E-01 i				0.28 o	0.026 o	0.013 o	12 o	2.7 o
DDE	72559		3.40E-01 i				0.2 o	0.018 o	0.0093 o	8.4 o	1.9 o
DDT	50293	5.00E-04 i		3.40E-01 i	3.40E-01 i		0.2 o	0.018 o	0.0093 o	8.4 o	1.9 o
Decabromo-diphenyl ether	1163195	1.00E-02 i				---	61 n	37 n	14 n	10000 n	780 n
Demetc	8064481	4.00E-03 i					15 n	0.15 n	0.054 n	n	3.1 n

Sources: 1=IRIS 2=HEAST 3=HEAST+1 4=W/D from IRIS 5=W/D from HEAST 6=EPA-ECAQ 7=Other EPA docs

Basis of RBC: $c =$ constant effects, $n =$ non-constant effects

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg		µg/L	µg/m³	mg/kg	mg/kg	mg/kg
Diazinon	313415	9.00E-04 n					33 n	3.3 n	1.2 n	920 n	70 n
1,4-Dibromobenzene	106376	1.00E-02 i				...	61 n	37 n	14 n	10000 n	780 n
Dibromochloromethane	124481	2.00E-02 i		8.40E-02 i		...	0.13 c	0.075 c	0.038 c	34 c	7.6 c
1,2-Dibromo-3-chloropropane	96128		5.71E-05 i	1.40E+00 n	6.90E-07 n	...	0.048 e	0.21 n	0.0023 c	2 c	0.46 c
1,2-Dichromoethane	106934			5.71E-05 n	8.50E+01 i	7.70E-01 i	0.00075 e	0.0081 c	0.000037 e	0.034 c	0.0075 c
Dibutyl phthalate	84742	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Dicamba	1918009	3.00E-02 i					1100 n	110 n	41 n	31000 n	2300 n
1,2-Dichlorobenzene	95501	9.00E-02 i	5.71E-02 n			...	370 n	210 n	120 n	92000 n	7000 n
1,3-Dichlorobenzene	541731	8.90E-02 o				...	540 n	320 n	120 n	91000 n	7000 n
1,4-Dichlorobenzene	106467		2.29E-01 i	2.40E-02 n		...	0.44 e	0.26 e	0.13 e	120 e	27 e
3,3'-Dichlorobenzidine	91941				4.50E-01 i		0.15 e	0.014 e	0.007 e	6.4 c	1.4 c
1,4-Dichloro-2-butene	764410				9.30E+00 n	...	0.0011 e	0.00067 e			
Dichlorodifluoromethane	757118	2.00E-01 i	5.71E-02 n			...	390 n	210 n	270 n	200000 n	16000 n
1,1-Dichloroethane	75343	1.00E-01 n	1.41E-01 n			...	810 n	520 n	140 n	100000 n	7800 n
1,2-Dichloroethane (EDC)	107062		2.86E-03 o	9.10E-02 i	9.10E-02 i	...	0.12 e	0.069 e	0.035 e	31 e	7 e
1,1-Dichloroethylene	75354	9.00E-03 i		6.00E-01 i	1.75E-01 i	...	0.044 e	0.036 e	0.0053 e	4.8 e	1.1 e
1,2-Dichloroethylene (cis)	156992	1.00E-02 n				...	61 n	37 n	14 n	10000 n	780 n
1,2-Dichloroethylene (trans)	156605	2.00E-02 i				...	120 n	73 n	27 n	20000 n	1600 n
1,2-Dichloroethylene (mixture)	540590	9.00E-03 n				...	55 n	33 n	12 n	9200 n	700 n
2,4-Dichlorophenol	120832	3.00E-03 i					110 n	11 n	4.1 n	3100 n	230 n
2,4-Dichlorophenoxyacetic Acid (2,4-D)	94757	1.00E-02 i				...	61 n	37 n	14 n	10000 n	780 n
4-(2,4-Dichlorophenoxy)butyric Acid	94826	8.00E-03 i					290 n	29 n	11 n	8200 n	630 n
1,2-Dichloropropane	78875		1.14E-03 i	6.80E-02 n		...	0.16 e	0.092 e	0.046 e	42 e	9.4 e
2,3-Dichloropropanol	616239	3.00E-03 i					110 n	11 n	4.1 n	3100 n	230 n
1,3-Dichloropropene	542756	3.00E-04 i	5.71E-03 i	1.80E-01 n	1.30E-01 n	...	0.077 e	0.048 e	0.018 e	16 e	3.5 e
Dichlorvos	62737	5.00E-04 i			2.90E-01 i		0.23 e	0.022 e	0.011 e	9.9 e	2.2 e
Dicofol	115322				4.40E-01 w		0.15 e	0.014 e	0.0072 e	6.5 e	1.3 e
Dicyclopentadiene	77716	3.00E-02 n	5.71E-05 n			...	0.42 n	0.21 n	41 n	31000 n	2300 n
Dieldrin	60571	5.00E-05 i		1.60E+01 i	1.61E+01 i		0.0042 e	0.00039 e	0.0002 e	0.18 e	0.04 e
Diesel emissions			1.43E-03 i				52 n	52 n			
Diethyl phthalate	84662	8.00E-01 i					29000 n	2900 n	1100 n	820000 n	63000 n
Diethylene glycol, monobutyl ether	112345			5.71E-03 n			210 n	21 n			
Diethylene glycol, monoethyl ether	111900	2.00E+00 n					73000 n	7300 n	2700 n	1000000 n	160000 n
Diethylformamide	617845	1.10E-02 n					400 n	40 n	15 n	11000 n	860 n
Di(2-ethylhexyl)adipate	103231	6.00E-01 i		1.20E-03 i			56 e	5.2 e	2.6 e	2400 e	530 e
Diethylstilbestrol	56531				4.70E+03 n		0.000014 e	1.30E-06 e	6.70E-07 e	0.00051 e	0.00014 e
Disenzoquat (Avenge)	43222486	8.00E-02 i					2900 n	290 n	110 n	82000 n	6300 n
Disubenzuron	35367385	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Diisopropyl methylphosphonate (DIMP)	1445756	8.00E-02 i					2900 n	290 n	110 n	82000 n	6300 n
Dimethipin	55290647	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Dimethoate	60515	2.00E-04 i					7.3 n	0.73 n	0.27 n	200 n	16 n

Sources: i=IRIS b=HEAST s=HEAST w=W/D from IRIS y=W/D from HEAST e=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	V O	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg*d/mg	kg*d/mg	C	µg/L	µg/m3	mg/kg	mg/kg	mg/kg
Dimethyl phthalate	131113	1.00E+01 n					370000 n	37000 n	14000 n	1000000 n	780000 n
Dimethyl terephthalate	120616	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Dimethylamine	124403		5.71E-06 w				0.21 n	0.021 n			
2,4-Dimethylaniline hydrochloride	21436964			5.80E-01 n			0.12 e	0.011 e	0.0054 e	4.9 e	1.1 e
2,4-Dimethylaniline	95681			7.50E-01 n			0.09 e	0.0083 e	0.0042 e	3.8 e	0.85 e
N,N-Dimethylaniline	121697	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
3,3'-Dimethylbenzidine	119937			9.20E+00 n			0.0073 e	0.00068 e	0.00034 e	0.31 e	0.069 e
N,N-Dimethylformamide	68122	1.00E-01 n	8.57E-03 i				3700 n	31 n	140 n	100000 n	7800 n
1,1-Dimethylhydrazine	57147			2.60E+00 n	3.50E+00 n		0.026 e	0.0018 e	0.0012 e	1.1 e	0.25 e
1,2-Dimethylhydrazine	540738			3.70E+01 w	3.70E+01 w		0.0018 e	0.00017 e	0.000085 e	0.077 e	0.017 e
2,4-Dimethylphenol	105679	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
2,6-Dimethylphenol	576261	6.00E-04 i					22 n	2.2 n	0.81 n	610 n	47 n
3,4-Dimethylphenol	95658	1.00E-01 i					37 n	3.7 n	1.4 n	1000 n	78 n
1,2-Dinitrobenzene	528290	4.00E-04 n					15 n	1.5 n	0.54 n	410 n	31 n
1,3-Dinitrobenzene	99650	1.00E-04 i					3.7 n	0.37 n	0.14 n	100 n	7.8 n
1,4-Dinitrobenzene	100254	4.00E-04 n					15 n	1.5 n	0.54 n	410 n	31 n
4,6-Dinitro-o-cylohexyl phenol	131895	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
2,4-Dinitrophenol	51285	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Dinitrotoluene mixture				6.80E-01 i			0.099 e	0.0092 e	0.0046 e	4.2 e	0.94 e
2,4-Dinitrotoluene	1142	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
2,6-Dinitrotoluene	6112	1.00E-03 n					37 n	3.7 n	1.4 n	1000 n	78 n
Dinoseb	88857	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
di-n-Octyl phthalate	117840	2.00E-02 n					730 n	73 n	27 n	20000 n	1600 n
1,4-Dioxane	123911			1.10E-02 i			6.1 e	0.57 e	0.29 e	260 e	58 e
Diphenamid	957517	3.00E-02 i					1100 n	110 n	41 n	31000 n	2300 n
Diphenylamine	122394	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
1,2-Diphenylhydrazine	122667		8.00E-01 i	7.70E-01 i			0.084 e	0.0081 e	0.0039 e	3.6 e	0.8 e
Diquat	85007	2.20E-03 i					80 n	8 n	3 n	2200 n	170 n
Direct black 38	1937377			8.60E+00 n			0.0078 e	0.00073 e	0.00037 e	0.33 e	0.074 e
Direct blue 6	2602462			8.10E+00 n			0.0063 e	0.00077 e	0.00039 e	0.35 e	0.079 e
Direct brown 95	16071866			9.30E+00 n			0.0072 e	0.00067 e	0.00034 e	0.31 e	0.069 e
Disulfoton	298044	4.00E-05 i					1.5 n	0.15 n	0.054 n	41 n	3.1 n
1,4-Dithiane	505293	1.00E-02 i					370 n	37 n	14 n	10000 n	780 n
Diuron	330541	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Dodine	2439103	4.00E-03 i					150 n	15 n	5.4 n	4100 n	310 n
Endosulfan	115297	6.00E-03 n					220 n	22 n	8.1 n	6100 n	470 n
Endothall	145733	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Endrin	72208	3.00E-04 i					11 n	1.1 n	0.41 n	310 n	23 n
Epichlorohydrin	106898	2.00E-03 n	2.86E-04 i	9.90E-03 i	4.20E-03 i		6.8 e	1 n	0.32 e	290 e	65 e
1,2-Epoxybutane	106887		5.71E-03 i				210 n	21 n			
Etheophenoxy(chloroethyl phosphonic acid)	16672870	5.00E-03 i					180 n	18 n	6.8 n		390 n

Sources: I=IRIS h=HEAST a=HEAST w=W/D from IRIS y=W/D from HEAST c=EPA-ECA O=o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	V O	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg	C	µg/L	µg/m ³	mg/kg	mg/kg	mg/kg
2-Ethoxyethanol acetate	111159	3.00E-01 h					11000 n	1100 n	410 n	310000 n	23000 n
2-Ethoxyethanol	110805	4.00E-01 h	5.71E-02 i				15000 n	210 n	540 n	410000 n	31000 n
Ethyl acrylate	140885			4.80E-02 h			1.4 o	0.13 o	0.066 o	60 o	13 c
EPTC (S-Ethyl dipropylthiocarbamate)	759944	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
Ethyl ether	60297	2.00E-01 i				***	1200 n	730 n	270 n	200000 n	16000 n
Ethyl methacrylate	97632	9.00E-02 h					3300 n	330 n	120 n	92000 n	7000 n
Ethyl acetate	141786	9.00E-01 i					33000 n	3300 n	1200 n	920000 n	70000 n
Ethylbenzene	100414	1.00E-01 i	2.86E-01 i			***	1300 n	1000 n	140 n	100000 n	7800 n
Ethylene cyanohydrin	109784	3.00E-01 h					11000 n	1100 n	410 n	310000 n	23000 n
Ethylene diamine	107153	2.00E-02 h					730 n	73 n	27 n	20000 n	1600 n
Ethylene glycol	107211	2.00E+00 i					73000 n	7300 n	2700 n	1000000 n	160000 n
Ethylene glycol, monobutyl ether	111762		5.71E-03 h				210 n	21 n			
Ethylene oxide	75218			1.02E+00 h	3.50E-01 h		0.066 o	0.018 o	0.0031 o	2.8 o	0.63 c
Ethylene thiourea (ETU)	96457	8.00E-05 i			6.00E-01 h		0.11 o	0.01 o	0.0053 o	4.8 o	1.1 c
Ethyl p-nitrophenyl phenylphosphorothioate	2104645	1.00E-05 i					0.37 n	0.037 n	0.014 n	10 n	0.78 n
Ethynitrosourea	759739			1.40E+02 w			0.00048 o	0.000045 o	0.000023 o	0.02 o	0.0046 c
Ethylphthalyl ethyl glycolate	84720	3.00E+00 i					110000 n	11000 n	4100 n	1000000 n	230000 n
Express	10120	8.00E-03 i					290 n	29 n	11 n	8200 n	610 n
Fenamiphos	22224926	2.50E-04 i					9.1 n	0.91 n	0.34 n	260 n	20 n
Fluometuron	2164172	1.30E-02 i					470 n	47 n	18 n	13000 n	1000 n
Fluoride	7782414	6.00E-02 i					2200 n	220 n	81 n	61000 n	4700 n
Fluoridone	59756604	8.00E-02 i					2900 n	290 n	110 n	82000 n	6300 n
Flurprimidol	56425913	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Flutolanil	66312965	6.00E-02 i					2200 n	220 n	81 n	61000 n	4700 n
Fluvalinate	69409945	1.00E-02 i					370 n	37 n	14 n	10000 n	780 n
Folpet	133073	1.00E-01 i		3.50E-03 i			19 o	1.8 o	0.9 o	820 o	180 c
Fomesafen	72178020			1.90E-01 i			0.35 o	0.033 o	0.017 o	15 o	3.4 c
Fonofos	944229	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Formaldehyde	50000	2.00E-01 i			4.55E-02 i		7300 n	0.14 o	270 n	200000 n	16000 n
Formic Acid	64186	2.00E+00 n					73000 n	7300 n	2700 n	100000 n	16000 n
Fosetyl-al	39148248	3.00E+00 i					110000 n	11000 n	4100 n	100000 n	23000 n
Furan	110009	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
Furazolidone	67458			3.80E+00 h			0.018 o	0.0016 o	0.00083 o	0.75 o	0.17 c
Furfural	98011	3.00E-03 i	1.43E-02 h				110 n	52 n	4.1 n	3100 n	230 n
Furium	531828			5.00E+01 n			0.0013 o	0.00013 o	0.000063 o	0.057 o	0.013 c
Fumecyclox	60568050			3.00E-02 i			2.2 o	0.21 o	0.11 o	95 o	21 c
Gluconate-ammonium	77182822	4.00E-04 i					15 n	1.5 n	0.54 n	410 n	31 n
Glycidaldehyde	765344	4.00E-04 i	2.86E-04 n				15 n	1 n	0.54 n	410 n	31 n
Glyphosate	1071836	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Haloxyp-methyl	69806402	5.00E-05 i					1.8 n	0.18 n	0.068 n	51 n	3.9 n
Harmony	79277273	1.30E-02 i					470 n	47 n	18 n	13000 n	1000 n

Sources: l=IRIS h=HEAST s=HEAST ab=x=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	V O	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg•d/mg	kg•d/mg	C	µg/L	µg/m3	mg/kg	mg/kg	mg/kg
HCH (beta)	319857			1.80E+00 l	1.80E+00 l		0.037 o	0.0035 o	0.0018 o	1.6 o	0.35 c
HCH (gamma) Lindane	58899	3.00E-04 l		1.30E+00 n			0.052 o	0.0048 o	0.0024 o	2.2 c	0.49 c
HCH-technical	608731			1.80E+00 l	1.79E+00 l		0.037 o	0.0035 o	0.0018 o	1.6 o	0.35 c
Heptachlor	76448	5.00E-04 l		4.50E+00 l	4.55E+00 l ***		0.0023 o	0.0014 o	0.0007 o	0.64 o	0.14 c
Heptachlor epoxide	1024573	1.30E-05 l		9.10E+00 l	9.10E+00 l ***		0.0012 o	0.00069 o	0.00035 o	0.31 o	0.07 c
Hexabromobenzene	87821	2.00E-03 l			***		12 n	7.3 n	2.7 n	2000 n	160 n
Hexachlorobenzene	118741	8.00E-04 l		1.60E+00 l	1.61E+00 l ***		0.0066 o	0.0039 o	0.002 o	1.8 o	0.4 c
Hexachlorobutadiene	87683	2.00E-04 n		7.80E-02 l	7.70E-02 l ***		0.14 o	0.081 o	0.04 o	37 o	8.2 c
Hexachlorocyclopentadiene	77474	7.00E-03 l	2.00E-05 n		***		0.15 n	0.073 n	9.5 n	7200 n	550 n
Hexachlorodibenzo-p-dioxin mixture	19408743			6.20E+03 l	4.55E+03 l		0.000011 b	1.40E-06 o	5.10E-07 o	0.00046 o	0.0001 c
Hexachloroethane	67721	1.00E-03 l		1.40E-02 l	1.40E-02 l ***		0.75 o	0.45 o	0.23 o	200 o	46 c
Hexachlorophene	70304	3.00E-04 l					11 n	1.1 n	0.41 n	310 n	23 n
Hexahydro-1,3,5-trinitro-1,3,5-triazine	121824	3.00E-01 l		1.10E-01 l			0.61 o	0.057 o	0.029 c	26 c	5.8 c
n-Hexane	110543	6.00E-02 n	5.71E-02 l		***		350 n	210 n	81 n	61000 n	4700 n
Hexazinone	51235042	3.30E-02 l					1200 n	120 n	45 n	34000 n	2600 n
Hydrazine, hydrazine sulfate	302012			3.00E+00 l	1.71E+01 l		0.022 o	0.00037 o	0.0011 o	0.95 o	0.21 c
Hydrogen chloride	7647010		2.00E-03 l				73 n	7.3 n			
Hydrogen sulfide	7783064	3.00E-03 l	2.57E-04 l				110 n	0.94 n	4.1 n	3100 n	230 n
Hydroquinone	123119	4.00E-02 n					1500 n	150 n	54 n	41000 n	3100 n
Imazolid	35554440	1.30E-02 l					470 n	47 n	18 n	13000 n	1000 n
Imazaquin	81335377	2.50E-01 l					9100 n	910 n	340 n	260100 n	20000 n
Iprodione	36734197	4.00E-02 l					1500 n	150 n	54 n	41000 n	3100 n
Isobutanol	78831	3.00E-01 l			**		1800 n	1100 n	410 n	310000 n	23000 n
Isophorone	78591	2.00E-01 l		9.50E-04 l			71 o	6.6 o	3.3 o	3000 o	670 c
Isopropalin	33820530	1.50E-02 l					550 n	55 n	20 n	15000 n	1200 n
Isopropyl methyl phosphonic acid	1832548	1.00E-01 l					3700 n	370 n	140 n	100000 n	7800 n
Isoxaben	82558507	5.00E-02 l					1800 n	180 n	68 n	51000 n	3900 n
Kepone	143900			1.80E+01 o			0.0037 o	0.00035 o	0.00018 o	0.16 o	0.035 c
Lactofen	77501614	2.00E-03 l					73 n	7.3 n	2.7 n	2000 n	160 n
Lead (tetraethyl)	78010	1.00E-07 l					0.0037 n	0.00037 n	0.00014 n	0.1 n	0.0078 n
Linuron	310552	2.00E-03 l					73 n	7.3 n	2.7 n	2000 n	160 n
Lithium	7439932	2.00E-02 o					730 n	73 n	27 n	20000 n	1600 n
Londax	83056996	2.00E-01 l					7300 n	730 n	270 n	200000 n	16000 n
Malathion	121755	2.00E-02 l					730 n	73 n	27 n	20000 n	1600 n
Maleic anhydride	108316	1.00E-01 l					3700 n	370 n	140 n	100000 n	7800 n
Maleic hydrazide	123331	5.00E-01 l					18000 n	1800 n	680 n	510000 n	39000 n
Malononitrile	109773	2.00E-05 n					0.73 n	0.073 n	0.027 n	20 n	1.6 n
Mancozeb	8018017	3.00E-02 n					1100 n	110 n	41 n	31000 n	2300 n
Maneb	12427382	5.00E-03 l					180 n	18 n	6.8 n	5100 n	390 n
Manganese and compounds	7439965	5.00E-03 l	1.43E-05 l				180 n	0.052 n	6.8 n	5100 n	390 n
Mephosf	950107	9.00E-05 n					3.3 n	0.33 n	0.12 n		7 n

Sources: i=IRIS h=HEAST s=HEAST & k=W/D from IRIS y=W/D from HEAST e=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogen effects n=noncarcinogen effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg*d/mg	kg*d/mg	C	µg/L	µg/m3	mg/kg	mg/kg	mg/kg
Mercury (inorganic)	7439976	3.00E-04 h	8.57E-05 h				11 n	0.31 n	0.41 n	310 n	23 n
Mercury (methyl)	22967926	3.00E-04 i					11 n	1.1 n	0.41 n	310 n	23 n
Merphos	150505	3.00E-05 i					1.1 n	0.11 n	0.041 n	31 n	2.3 n
Merphos oxide	78488	3.00E-05 i					1.1 n	0.11 n	0.041 n	31 n	2.3 n
Metalaxyl	57837191	6.00E-02 i					2200 n	220 n	81 n	61000 n	4700 n
Methacrylonitrile	126987	1.00E-04 i	2.00E-04 h				3.7 n	0.73 n	0.14 n	100 n	7.8 n
Methamidophos	10265926	5.00E-05 i					1.8 n	0.18 n	0.068 n	51 n	3.9 n
Methanol	67561	5.00E-01 i					18000 n	1800 n	680 n	510000 n	39000 n
Methidathion	940378	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
Methomyl	1672775	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
Methoxychlor	72435	5.00E-03 i					180 n	18 n	6.8 n	5100 n	390 n
2-Methoxyethanol acetate	110496	2.00E-03 h					73 n	7.3 n	2.7 n	2000 n	160 n
2-Methoxyethanol	109864	1.00E-03 n	5.71E-03 i				37 n	21 n	1.4 n	1000 n	78 n
2-Methoxy-5-nitroaniline	99592			4.60E-02 h			1.5 o	0.14 o	0.069 o	62 o	14 o
Methyl acetate	79209	1.00E+00 h					37000 n	3700 n	1400 n	1000000 n	78000 n
Methyl acrylate	96333	3.00E-02 h					1100 n	110 n	41 n	31000 n	2300 n
2-Methylaniline hydrochloride	636215			1.80E-01 h			0.37 o	0.035 o	0.018 o	16 o	3.5 o
2-Methylaniline	95534			2.40E-01 h			0.28 o	0.026 o	0.013 o	12 o	2.7 o
Methyl chlorocarbonate	79221	1.00E+00 w					37000 n	3700 n	1400 n	1000000 n	78000 n
4-(2-Methyl-4-chlorophenoxy)butyric acid	94815	1.00E-02 i					370 n	37 n	14 n	10000 n	780 n
2-Methyl-4-chlorophenoxyacetic acid	94746	5.00E-04 i					18 n	1.8 n	0.68 n	510 n	39 n
2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	1.00E-03 i					37 n	3.7 n	1.4 n	1000 n	78 n
Methylcyclohexane	108872		8.57E-01 h				31000 n	3100 n			
Methylene bromide	74953	1.00E-02 h			***		61 n	37 n	14 n	10000 n	780 n
Methylene chloride	75092	6.00E-02 i	8.57E-01 h	7.50E-03 i	1.64E-03 i ***		4.1 o	3.8 o	0.42 o	380 o	85 o
4,4'-Methylene bis(2-chloroaniline)	101144	7.00E-04 h		1.30E-01 h	1.30E-01 h		0.52 o	0.048 o	0.024 o	22 o	4.9 o
4,4'-Methylenebisbenzeneamine	101779			2.50E-01 h			0.27 o	0.025 o	0.013 o	11 o	2.6 o
4,4'-Methylene bis(N,N'-dimethyl)aniline	101611			4.60E-02 i			1.5 o	0.14 o	0.069 o	62 o	14 o
4,4'-Methylenediphenyl isocyanate	101648		5.71E-06 h		***		0.035 n	0.021 n			
Methyl ethyl ketone	78933	6.00E-01 i	2.86E-01 i				22000 n	1000 n	810 n	610000 n	47000 n
Methyl hydrazine	60344			1.10E+00 h			0.061 o	0.0057 o	0.0029 o	2.6 o	0.58 o
Methyl isobutyl ketone	108101	5.00E-02 h	2.29E-02 h				1800 n	84 n	68 n	51000 n	3900 n
Methyl methacrylate	80626	8.00E-02 h					2900 n	290 n	110 n	82000 n	6300 n
2-Methyl-5-nitroaniline	99558			3.30E-02 h			2 o	0.19 o	0.096 o	87 o	19 o
Methyl parathion	298000	2.50E-04 i					9.1 n	0.91 n	0.34 n	260 n	20 n
2-Methylphenol (o-cresol)	95487	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
3-Methylphenol (m-cresol)	103394	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
4-Methylphenol (p-cresol)	106445	5.00E-03 h					180 n	18 n	6.8 n	5100 n	390 n
Methyl styrene (mixture)	25013154	6.00E-03 h	1.14E-02 h		***		60 n	42 n	8.1 n	6100 n	470 n
Methyl styrene (alpha)	98839	7.00E-02 h			***		430 n	260 n	95 n	72000 n	5500 n
Methyl tertbutyl ether (MTBE)	1634044	5.00E-03 o	8.57E-01 i		***		180 n	3100 n	6.8 n	5100 n	390 n
Meldador (Dual)	51218452	1.50E-01 i					***	***	***	***	***

Sources: I=IRIS h=HEAST s=HEAST d=WD from IRIS y=WD from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogen effects n=noncarcinogen effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg/d/mg	kg/d/mg	C	µg/L	µg/m³	mg/kg	mg/kg	mg/kg
Metrabuzin	21807649	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
Mirex	2385855	2.00E-04 i		1.80E+00 h			0.037 o	0.0035 o	0.0018 o	1.6 o	0.15 c
Molinate	2212671	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Molybdenum	7439987	5.00E-03 i					180 n	18 n	6.8 n	5100 n	390 n
Monochloramine	10599903	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Naled	300765	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Napropamide	15299997	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Nickel refinery dust								0.0075 o			
Nickel (soluble salts)	7440020	2.00E-02 i			8.40E-01 i		730 n	73 n	27 n	20000 n	1600 n
Nickel subsulfide	12035722				1.70E+00 i			0.0037 o			
Nitrapyrin	1929624	1.50E-01 s					55 n	5.5 n	2 n	1500 n	120 n
Nitrate	14797558	1.60E+00 i					58000 n	5800 n	2200 n	1000000 n	130000 n
Nitric Oxide	10102439	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
Nitrite	14797650	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
2-Nitroaniline	88744	6.00E-05 =	5.71E-05 h				2.2 n	0.21 n	0.081 n	61 n	4.7 n
3-Nitroaniline	99192	1.00E-03 o					110 n	11 n	4.1 n	3100 n	230 n
4-Nitroaniline	100016	1.00E-01 o					110 n	11 n	4.1 n	3100 n	230 n
Nitrobenzene	98951	5.00E-04 i	5.71E-04 h			---	3.4 n	2.1 n	0.68 n	510 n	39 n
Nitrofurantoin	67209	7.00E-02 h					2600 n	260 n	95 n	72000 n	5500 n
Nitrofurazone	59870			1.50E+00 h	9.40E+00 h		0.045 o	0.00067 o	0.0021 o	1.9 o	0.43 c
Nitrogen dioxide	10102440	1.00E+00 i					37000 n	3700 n	1400 n	1000000 n	78000 n
Nitroguanidine	556887	1.00E-01 i					3700 n	370 n	140 n	100000 n	7800 n
4-Nitrophend	100027	6.20E-02 o					2300 n	230 n	84 n	63000 n	4800 n
2-Nitropropane	79469		5.71E-03 i		9.40E+00 h		210 n	0.00067 o			
N-Nitrosodi-n-butylamine	924163			5.40E+00 i	5.60E+00 i		0.012 o	0.0011 o	0.00058 o	0.53 o	0.12 c
N-Nitrosodietanolamine	1116547			2.80E+00 i			0.024 o	0.0022 o	0.0011 o	1 o	0.23 c
N-Nitrosodiethylamine	55185			1.50E+02 i	1.51E+02 i		0.00045 o	0.000041 o	0.000021 o	0.019 o	0.0043 c
N-Nitrosodimethylamine	62799			5.10E+01 i	4.90E+01 i		0.0013 o	0.00013 o	0.000062 o	0.056 o	0.013 c
N-Nitrosodiphenylamine	86306			4.90E-03 i			14 o	1.3 o	0.64 o	580 o	130 o
N-Nitroso di-n-propylamine	621647			7.00E+00 i			0.0096 o	0.00089 o	0.00045 o	0.41 o	0.091 c
N-Nitroso-N-methylethylamine	10595956			2.20E+01 i			0.0031 o	0.00028 o	0.00014 o	0.13 o	0.029 c
N-Nitrosopyrrolidine	930552			2.10E+00 i	2.13E+00 i		0.032 o	0.0029 o	0.0015 o	1.4 o	0.3 c
m-Nitrotoluene	99081	1.00E-02 h				---	61 n	37 n	14 n	10000 n	780 n
o-Nitrotoluene	88722	1.00E-02 h				---	61 n	37 n	14 n	10000 n	780 n
p-Nitrotoluene	99990	1.00E-02 h				---	61 n	37 n	14 n	10000 n	780 n
Norflurazon	27314132	4.00E-02 i					1500 n	150 n	54 n	41000 n	3100 n
NuStar	85509199	7.00E-04 i					26 n	2.6 n	0.95 n	720 n	55 n
Octabromodiphenyl ether	32536520	3.00E-03 i					110 n	11 n	4.1 n	3100 n	230 n
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691410	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Octamethylpyrophosphoramide	152169	2.00E-03 h					73 n	7.3 n	2.7 n	2000 n	160 n
Oryzalin	19044883	5.00E-02 i					1800 n	180 n	68 n	51 n	3900 n
Oxadiaz	19666100	4.00E-03 i					180 n	18 n	6.8 n	100 n	100 n

Sources: I=IRIS h=HEAST s=HEAST w=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogenic effects n=noncarcinogenic effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg		µg/L	µg/m³	mg/kg	mg/kg	mg/kg
Oxamyl	23135220	2.50E-02 i					910 n	91 n	34 n	26000 n	2000 n
Oxyfluorfen	42874033	3.00E-03 i					110 n	11 n	4.1 n	3100 n	230 n
Padobutrazol	76738620	1.30E-02 i					470 n	47 n	18 n	13000 n	1000 n
Paraquat	1910425	4.50E-03 i					160 n	16 n	6.1 n	4600 n	350 n
Parathion	56382	6.00E-03 n					220 n	22 n	8.1 n	6100 n	470 n
Pebulate	1114712	5.00E-02 n					1800 n	180 n	68 n	51000 n	3900 n
Pendimethalin	40487421	4.00E-02 i					1500 n	150 n	54 n	41000 n	3100 n
Pentabromo-6-chloro cyclohexane	87843			2.30E-02 n			2.9 o	0.27 o	0.14 o	120 o	28 c
Pentabromodiphenyl ether	32534819	2.00E-03 i					73 n	7.3 n	2.7 n	2000 n	160 n
Pentachlorobenzene	608935	8.00E-04 i				---	4.9 n	2.9 n	1.1 n	820 n	63 n
Pentachloronitrobenzene	82688	3.00E-03 i		2.60E-01 n		---	0.041 o	0.024 o	0.012 o	11 e	2.5 c
Pentachlorophenol	87865	3.00E-02 i		1.20E-01 i			0.56 o	0.052 o	0.026 o	24 e	5.3 c
Permethrin	12645531	5.00E-02 i					1800 n	180 n	68 n	51000 n	3900 n
Phenmedipharm	13684634	2.50E-01 i					9100 n	910 n	340 n	260000 n	20000 n
Phenol	108952	6.00E-01 i					22000 n	2200 n	810 n	610000 n	47000 n
m-Phenylenediamine	108452	6.00E-03 i					220 n	22 n	8.1 n	6100 n	470 n
o-Phenylenediamine	95545	6.00E-03 n					220 n	22 n	8.1 n	6100 n	470 n
p-Phenylenediamine	106303	1.90E-01 n					6900 n	690 n	260 n	190000 n	15000 n
Phenylmercuric acetate	62384	8.00E-05 i					2.9 n	0.29 n	0.11 n	82 n	6.3 n
2-Phenylphenol	90437			1.94E-03 n			35 o	3.2 o	1.6 o	1500 o	330 c
Phorate	298022	2.00E-04 n					7.3 n	0.73 n	0.27 n	200 n	16 n
Phosmet	732116	2.00E-02 i					730 n	73 n	27 n	20000 n	1600 n
Phosphine	7803512	3.00E-04 i	8.57E-06 n				11 n	0.031 n	0.41 n	310 n	23 n
Phosphorus (white)	7723140	2.00E-05 i					0.73 n	0.073 n	0.027 n	20 n	1.6 n
p-Phthalic acid	100210	1.00E+00 n					37000 n	3700 n	1400 n	100000 n	78000 n
Phthalic anhydride	85449	2.00E+00 i	3.43E-01 n				71000 n	1300 n	2700 n	100000 n	160000 n
Pidoram	1918121	7.00E-02 i					2600 n	260 n	95 n	72010 n	5500 n
Pirimiphos-methyl	29212937	1.00E-02 i					370 n	37 n	14 n	10010 n	780 n
Polybrominated biphenyls		7.00E-06 n		8.90E+00 n			0.0076 o	0.0007 o	0.00035 o	0.32 o	0.072 c
Polychlorinated biphenyls (PCBs)	1116163			7.70E+00 i			0.0087 o	0.00081 o	0.00041 o	0.37 o	0.063 c
Arodot 1016	12674112	7.00E-05 i					2.6 n	0.26 n	0.095 n	72 n	5.5 n
Polychlorinated terphenyls (PCTs)				4.50E+00 o			0.015 o	0.0014 o	0.0007 o	0.64 o	0.14 c
Polynuclear aromatic hydrocarbons											
Acenaphthene	83329	6.00E-02 i					2200 n	220 n	81 n	61000 n	4700 n
Anthracene	120127	3.00E-01 i					11000 n	1100 n	410 n	310000 n	23000 n
Benzo[a]pyrene	50328			7.30E+00 i	6.10E+00 n		0.0092 o	0.001 o	0.00043 o	0.39 o	0.088 c
Benzo[b]fluoranthene	205992			7.30E-01 o	6.10E-01 o		0.092 o	0.01 o	0.0043 o	3.9 o	0.88 c
Benzo[k]fluoranthene	207089			7.30E-02 o	6.10E-02 o		0.92 o	0.1 o	0.043 o	39 o	8.8 c
Benz[a]anthracene	56553			7.30E-01 o	6.10E-01 o		0.092 o	0.01 o	0.0043 o	3.9 o	0.88 c
Chrysene	218019			7.30E-03 o	6.10E-03 o		9.2 o	1 o	0.43 o	390 o	88 c
Dibenz[ah]anthracene	53703			7.30E+00 o	6.10E+00 o		0.0092 o	0.001 o	0.00043 o	0.39 o	0.088 c
Fluoranthene	206440	4.00E-02 i					1000 n	100 n			

Sources: *i*=IRIS *h*=HEAST *a*=HEAST *w*=W/D from IRIS *y*=W/D from HEAST *c*=EPA-ECAO *o*=Other EPA docs.

Basis of RBC: *c*=carcinogen effects *n*=noncarcinogen effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	V O C	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg/d/mg	kg/d/mg		µg/L	µg/m ³	mg/kg	mg/kg	mg/kg
Fluorene	86737	4.00E-02 <i>i</i>					1500 <i>n</i>	150 <i>n</i>	54 <i>n</i>	41000 <i>n</i>	3100 <i>n</i>
Indeno[1,2,3-cd]pyrene	193395			7.30E-01 <i>a</i>	6.10E-01 <i>a</i>		0.092 <i>a</i>	0.01 <i>a</i>	0.0043 <i>a</i>	3.9 <i>a</i>	0.88 <i>c</i>
Naphthalene	91200	4.00E-02 <i>w</i>					1500 <i>n</i>	150 <i>n</i>	54 <i>n</i>	41000 <i>n</i>	3100 <i>n</i>
Pyrene	129000	3.00E-02 <i>i</i>					1100 <i>n</i>	110 <i>n</i>	41 <i>n</i>	31000 <i>n</i>	2300 <i>n</i>
Prochloraz	67747095	9.00E-03 <i>i</i>			1.50E-01 <i>i</i>		0.45 <i>a</i>	0.042 <i>a</i>	0.021 <i>a</i>	19 <i>a</i>	4.3 <i>c</i>
Profluralin	26399360	6.00E-03 <i>h</i>					220 <i>n</i>	22 <i>n</i>	8.1 <i>n</i>	6100 <i>n</i>	470 <i>n</i>
Prometon	1610180	1.50E-02 <i>i</i>					550 <i>n</i>	55 <i>n</i>	20 <i>n</i>	15000 <i>n</i>	1200 <i>n</i>
Prometryn	7287196	4.00E-03 <i>i</i>					150 <i>n</i>	15 <i>n</i>	5.4 <i>n</i>	4100 <i>n</i>	310 <i>n</i>
Pronamide	23990585	7.50E-02 <i>i</i>					2700 <i>n</i>	270 <i>n</i>	100 <i>n</i>	77000 <i>n</i>	5900 <i>n</i>
Propachlor	1918167	1.30E-02 <i>i</i>					470 <i>n</i>	47 <i>n</i>	18 <i>n</i>	13000 <i>n</i>	1000 <i>n</i>
Propanil	709988	5.00E-03 <i>i</i>					180 <i>n</i>	18 <i>n</i>	6.8 <i>n</i>	5100 <i>n</i>	390 <i>n</i>
Propargite	2312358	2.00E-02 <i>i</i>					730 <i>n</i>	73 <i>n</i>	27 <i>n</i>	20000 <i>n</i>	1600 <i>n</i>
Propargyl alcohol	107197	2.00E-03 <i>i</i>					73 <i>n</i>	7.3 <i>n</i>	2.7 <i>n</i>	2000 <i>n</i>	160 <i>n</i>
Propazine	139402	2.00E-02 <i>i</i>					730 <i>n</i>	73 <i>n</i>	27 <i>n</i>	20000 <i>n</i>	1600 <i>n</i>
Propham	122429	2.00E-02 <i>i</i>					730 <i>n</i>	73 <i>n</i>	27 <i>n</i>	20000 <i>n</i>	1600 <i>n</i>
Propiconazole	60207901	1.30E-02 <i>i</i>					470 <i>n</i>	47 <i>n</i>	18 <i>n</i>	13000 <i>n</i>	1000 <i>n</i>
Propylene glycol	57556	2.00E+01 <i>h</i>					730000 <i>n</i>	73000 <i>n</i>	27000 <i>n</i>	1000000 <i>n</i>	1000000 <i>n</i>
Propylene glycol, monoethyl ether	52125538	7.00E-01 <i>h</i>					26000 <i>n</i>	2600 <i>n</i>	950 <i>n</i>	720000 <i>n</i>	55000 <i>n</i>
Propylene glycol, monomethyl ether	107982	7.00E-01 <i>h</i>	5.71E-01 <i>i</i>				26000 <i>n</i>	2100 <i>n</i>	950 <i>n</i>	720000 <i>n</i>	55000 <i>n</i>
Propylene oxide	75569		8.57E-03 <i>i</i>	2.40E-01 <i>i</i>	1.29E-02 <i>i</i>		0.28 <i>a</i>	0.49 <i>a</i>	0.013 <i>a</i>	12 <i>a</i>	2.7 <i>c</i>
Pursuit	81315775	2.50E-01 <i>i</i>					9100 <i>n</i>	910 <i>n</i>	340 <i>n</i>	260000 <i>n</i>	20000 <i>n</i>
Pydrin	51630581	2.50E-02 <i>i</i>					910 <i>n</i>	91 <i>n</i>	34 <i>n</i>	26000 <i>n</i>	2000 <i>n</i>
Pyridine	110861	1.00E-03 <i>i</i>					37 <i>n</i>	3.7 <i>n</i>	1.4 <i>n</i>	1000 <i>n</i>	78 <i>n</i>
Quinalphos	13593038	5.00E-04 <i>i</i>					18 <i>n</i>	1.8 <i>n</i>	0.68 <i>n</i>	510 <i>n</i>	39 <i>n</i>
Quinoline	91225		1.20E+01 <i>h</i>				0.0056 <i>a</i>	0.00052 <i>a</i>	0.00026 <i>a</i>	0.24 <i>a</i>	0.053 <i>c</i>
Resmethrin	10463868	3.00E-02 <i>i</i>					1100 <i>n</i>	110 <i>n</i>	41 <i>n</i>	31000 <i>n</i>	2300 <i>n</i>
Ronnel	299843	5.00E-02 <i>h</i>					1800 <i>n</i>	180 <i>n</i>	68 <i>n</i>	51000 <i>n</i>	3900 <i>n</i>
Rotenone	83794	4.00E-03 <i>i</i>					150 <i>n</i>	15 <i>n</i>	5.4 <i>n</i>	4100 <i>n</i>	310 <i>n</i>
Savay	78587050	2.50E-02 <i>i</i>					910 <i>n</i>	91 <i>n</i>	34 <i>n</i>	26000 <i>n</i>	2000 <i>n</i>
Selenious Acid	778XXXX	5.00E-03 <i>i</i>					180 <i>n</i>	18 <i>n</i>	6.8 <i>n</i>	5100 <i>n</i>	390 <i>n</i>
Selenium	7782492	5.00E-03 <i>i</i>					180 <i>n</i>	18 <i>n</i>	6.8 <i>n</i>	5100 <i>n</i>	390 <i>n</i>
Selenourea	630104	5.00E-03 <i>h</i>					180 <i>n</i>	18 <i>n</i>	6.8 <i>n</i>	5100 <i>n</i>	390 <i>n</i>
Sethoxydim	74051802	9.00E-02 <i>i</i>					3300 <i>n</i>	330 <i>n</i>	120 <i>n</i>	92000 <i>n</i>	7000 <i>n</i>
Silver and compounds	7440224	5.00E-03 <i>i</i>					180 <i>n</i>	18 <i>n</i>	6.8 <i>n</i>	5100 <i>n</i>	390 <i>n</i>
Simazine	122349	5.00E-03 <i>i</i>		1.20E-01 <i>h</i>			0.56 <i>a</i>	0.052 <i>a</i>	0.026 <i>a</i>	24 <i>a</i>	5.3 <i>c</i>
Sodium azide	26628228	4.00E-03 <i>i</i>					150 <i>n</i>	15 <i>n</i>	5.4 <i>n</i>	4100 <i>n</i>	310 <i>n</i>
Sodium diethyldithiocarbamate	148185	3.00E-02 <i>i</i>		2.70E-01 <i>h</i>			0.25 <i>a</i>	0.023 <i>a</i>	0.012 <i>a</i>	11 <i>a</i>	2.4 <i>c</i>
Sodium fluoracetate	62748	2.00E-05 <i>i</i>					0.73 <i>n</i>	0.073 <i>n</i>	0.027 <i>n</i>	20 <i>n</i>	1.6 <i>n</i>
Sodium metavanadate	13718268	1.00E-03 <i>h</i>					37 <i>n</i>	3.7 <i>n</i>	1.4 <i>n</i>	1000 <i>n</i>	78 <i>n</i>
Strontrium, stable	7440246	6.00E-01 <i>i</i>					22000 <i>n</i>	2200 <i>n</i>	810 <i>n</i>	610000 <i>n</i>	47000 <i>n</i>
Strychnine	57249	3.00E-04 <i>i</i>					11 <i>n</i>	1.1 <i>n</i>	0.41 <i>n</i>	?	23 <i>n</i>
Styrene	104425	2.00E-01 <i>i</i>	2.86E-01			...	1600 <i>n</i>	1000 <i>n</i>	270 <i>n</i>	200 <i>n</i>	16000 <i>n</i>

Basis of RBC: c = carcinogenic effects n = noncarcinogenic effects

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water	Ambient air	Fish	Industrial soil	Residential soil
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg		µg/L	µg/m3	mg/kg	mg/kg	mg/kg
Systhane	88671890	2.50E-02 /					910 n	91 n	34 n	26000 n	2000 n
2,3,7,8-TCDD (dioxin)	1746016			1.50E+05 n	1.50E+05 n		4.50E-07 o	4.20E-08 o	2.10E-08 o	0.000019 o	4.30E-06 c
Tebuthiuron	34014181	7.00E-02 /					2600 n	260 n	95 n	72000 n	5500 n
Temephos	3383968	2.00E-02 n					730 n	73 n	27 n	20000 n	1600 n
Terbacil	5902512	1.30E-02 /					470 n	47 n	18 n	13000 n	1000 n
Terbufos	13071799	2.50E-05 n					0.91 n	0.091 n	0.034 n	26 n	2 n
Terbutryn	886500	1.00E-03 /					37 n	3.7 n	1.4 n	1000 n	78 n
1,2,4,5-Tetrachlorobenzene	95943	3.00E-04 /				...	1.8 n	1.1 n	0.41 n	310 n	23 n
1,1,1,2-Tetrachloroethane	630206	3.00E-02 /		2.60E-02 /	2.59E-02 /	...	0.41 o	0.24 o	0.12 o	110 o	25 c
1,1,2,2-Tetrachloroethane	630206			2.00E-01 /	2.03E-01 /	...	0.052 o	0.031 o	0.016 o	14 o	3.2 c
Tetrachloroethylene (PCE)	127184	1.00E-02 /		5.20E-02 o	2.03E-03 o	...	1.1 o	3.1 o	0.061 o	55 o	12 c
2,3,4,6-Tetrachlorophenol	58902	3.00E-02 /					1100 n	110 n	41 n	31000 n	2300 n
p,a,a-a-Tetrachlorotoluene	5216251			2.00E+01 n		...	0.00053 o	0.00031 o	0.00016 o	0.14 o	0.032 c
Tetrachlorovinphos	961115	3.00E-02 /		2.40E-02 n			2.8 o	0.26 o	0.13 o	120 o	27 c
Tetraethylthiopyrophosphate	3689245	5.00E-04 /					18 n	1.8 n	0.68 n	510 n	39 n
Thallic oxide	1314325	7.00E-05 n					2.6 n	0.26 n	0.095 n	72 n	5.5 n
Thallium											
Thallium acetate	563688	9.00E-05 /					3.3 n	0.33 n	0.12 n	92 n	7 n
Thallium carbonate	6533739	8.00E-05 /					2.9 n	0.29 n	0.11 n	82 n	6.3 n
Thallium chloride	7791120	8.00E-05 /					2.9 n	0.29 n	0.11 n	82 n	6.3 n
Thallium nitrate	10102451	9.00E-05 /					3.3 n	0.33 n	0.12 n	92 n	7 n
Thallium selenite	12039520	9.00E-05 n					3.3 n	0.33 n	0.12 n	92 n	7 n
Thallium sulfate	7446186	8.00E-05 /					2.9 n	0.29 n	0.11 n	82 n	6.3 n
Thiobencarb	28249776	1.00E-02 /					370 n	37 n	14 n	10000 n	780 n
2-(Thiocyanomethylthio)-benzothiazole	21564170	3.00E-02 n					1100 n	110 n	41 n	31000 n	2300 n
Thiosfanox	39196184	3.00E-04 n					11 n	1.1 n	0.41 n	310 n	23 n
Thiophanate-methyl	23564058	8.00E-02 /					2900 n	290 n	110 n	82000 n	6300 n
Thiram	137268	5.00E-03 /					180 n	18 n	6.8 n	5100 n	390 n
Tin and compounds							22000 n	2200 n	810 n	610000 n	47000 n
Toluene	104881	2.00E-01 /	1.14E-01 n			...	750 n	420 n	270 n	200000 n	16000 n
Toluene-2,4-diamine	958117			3.20E+00 n			0.021 o	0.0102 o	0.0099 o	0.89 o	0.2 c
Toluene-2,5-diamine	95705	6.00E-01 n					22000 n	2200 n	810 n	610000 n	47000 n
Toluene-2,6-diamine	823405	2.00E-01 n					7300 n	730 n	270 n	200000 n	16000 n
p-Tolidine	106490			1.90E-01 n			0.35 o	0.033 o	0.017 o	15 o	3.4 c
Toxaphene	8001352			1.10E+00 /	1.12E+00 /		0.061 o	0.0056 o	0.0029 o	2.6 o	0.58 c
Tralomethrin	66841256	7.50E-03 /					270 n	27 n	10 n	7700 n	590 n
Triallate	2303175	1.30E-02 /					470 n	47 n	18 n	13000 n	1000 n
Triasulfuron	82097505	1.00E-02 /					370 n	37 n	14 n	10000 n	780 n
1,2,4-Tribromobenzene	615543	5.00E-03 /				...	30 n	18 n	6.8 n	5100 n	390 n
Tributyltin oxide (TBTO)	56339	3.00E-05 /					1.1 n	0.11 n	0.041 n	31 n	2.3 n
2,4,6-Trichloroaniline hydrochloride	33663502			2.90E-02 n			2.3 o	0.22 o	0.11 o	99 o	22 c

Sources: /=IRIS h=HEAST a=HEAST ab. x=W/D from IRIS y=W/D from HEAST c=EPA-ECAO o=Other EPA docs.

Basis of RBC: c=carcinogen effects n=noncarcinogen effects.

Contaminant	CAS	RfDo	RfDi	CPSo	CPSi	VOC	Tap water µg/L	Ambient air µg/m³	Fish mg/kg	Industrial soil mg/kg	Residential soil mg/kg
		mg/kg/d	mg/kg/d	kg·d/mg	kg·d/mg	C		µg/L	µg/m³	mg/kg	mg/kg
1,2,4-Trichlorobenzene	120821	1.00E-02 /	2.57E-03 n			---	18 n	9.4 n	14 n	10000 n	780 n
1,1,1-Trichloroethane	71556	9.00E-02 w	2.86E-01 w			---	1300 n	1000 n	120 n	92000 n	7000 n
1,1,2-Trichloroethane	79005	4.00E-03 /		5.70E-02 /	5.60E-02 /	---	0.19 o	0.11 o	0.055 o	50 c	11 c
Trichloroethylene (TCE)	79016	6.00E-03 o		1.10E-02 w	6.00E-03 o	---	1.6 o	1 o	0.29 o	260 o	58 c
Trichlorofluoromethane	75694	3.00E-01 /	2.00E-01 n			---	1300 n	730 n	410 n	310000 n	23000 n
2,4,5-Trichlorophenol	95954	1.00E-01 /					3700 n	370 n	140 n	100000 n	7800 n
2,4,6-Trichlorophenol	88062			1.10E-02 /	1.09E-02 /		6.1 o	0.57 o	0.29 o	260 o	58 c
2,4,5-Trichlorophenoxyacetic acid	93765	1.00E-02 /					370 n	37 n	14 n	10000 n	780 n
2-(2,4,5-Trichlorophenoxy)propionic acid	93721	8.00E-03 /					290 n	29 n	11 n	8200 n	630 n
1,1,2-Trichloropropane	598776	5.00E-03 /				---	30 n	18 n	6.8 n	5100 n	390 n
1,2,3-Trichloropropane	96184	6.00E-03 /				---	37 n	22 n	8.1 n	6100 n	470 n
1,2,3-TCP as carcinogen	96184			2.70E+00 o		---	0.0039 o	0.0023 o	0.0012 o	1.1 c	0.24 c
1,2,3-Trichloropropene	96195	5.00E-03 n				---	30 n	18 n	6.8 n	5100 n	390 n
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	3.00E+01 /	8.57E+00 n			---	59000 n	31000 n	41000 n	1000000 n	1000000 n
Tridiphane	58138082	3.00E-03 /					110 n	11 n	4.1 n	3100 n	230 n
Triethylamine	121448		2.00E-03 /				73 n	73 n			
Trifluralin	1582098	7.50E-03 /		7.70E-03 /			8.7 o	0.81 o	0.41 o	370 o	83 c
Trimethyl phosphate	512561			3.70E-02 n			1.8 o	0.17 o	0.085 o	77 o	17 c
1,2,4-Trimethylbenzene	95636	5.00E-04 o				---	3 n	1.8 n	0.68 n	510 n	39 n
1,3,5-Trimethylbenzene	108678	4.00E-04 o				---	2.4 n	1.5 n	0.54 n	410 n	31 n
1,3,5-Trinitrobenzene	99354	5.00E-05 /					1.8 n	0.18 n	0.068 n	51 n	3.9 n
Trinitrophenylmethylnitramine	479458	1.00E-02 n					370 n	37 n	14 n	10000 n	780 n
2,4,6-Trinitrotoluene	118967	5.00E-04 /		3.00E-02 /			2.2 o	0.21 o	0.11 o	95 o	21 c
Uranium (soluble salts)	7440611	3.00E-03 /					110 n	11 n	4.1 n	3100 n	230 n
Vanadium	7440622	7.00E-03 n					260 n	26 n	9.5 n	7200 n	550 n
Vanadium pentoxide	1314621	9.00E-03 /					330 n	33 n	12 n	9200 n	700 n
Vanadium sulfate	16917423	2.00E-02 n					730 n	73 n	27 n	20000 n	1600 n
Vernam	1929777	1.00E-03 /					37 n	3.7 n	1.4 n	1000 n	78 n
Vindoxolin	50471448	2.50E-02 /					910 n	91 n	34 n	26000 n	2000 n
Vinyl acetate	1108054	1.00E+00 n	5.71E-02 /				37000 n	210 n	1410 n	100000 n	78000 n
Vinyl bromide	5916112		8.57E-04 /			---	5.2 n	3.1 n			
Vinyl chloride	75014			1.90E+00 n	3.00E-01 n	---	0.019 o	0.021 o	0.0017 o	1.5 o	0.34 c
Warfarin	81812	3.00E-04 /					11 n	1.1 n	0.41 n	310 n	23 n
m-Xylene	108321	2.00E+00 n	2.00E-01 w			---	1400 n	730 n	2700 n	1000000 n	160000 n
n-Xylene	95476	2.00E+00 n	2.00E-01 w			---	1400 n	730 n	2700 n	1000000 n	160000 n
p-Xylene	106423		8.57E-02 w			---	520 n	310 n			

Memorandum

Florida Department of
Environmental Protection

TO: Jorge Caspary, Technical Review Section
Bureau of Waste Cleanup

THROUGH: Jim Crane, Technical Review Section *JJC*
Bureau of Waste Cleanup

FROM: Ligia *Mora*-Applegate, Technical Review Section
Bureau of Waste Cleanup

DATE: February 14, 1994

SUBJECT: *Cleanup Goals for the DOD Sites*

Attached, for your information and use, please find the soil cleanup goals. If there is ground water contamination, the leachability-based cleanup goals should be considered and compared with the health-based cleanup goals using the applicable scenario (i.e., residential or industrial). The lowest of the two sets should be the final cleanup goal; if the industrial scenario is applicable, the site must have a deed restriction for residential land uses and the like. In addition, where appropriate, the inorganics should pass TCLP.

Among the health-based levels, if a residential scenario is applicable you need to look under the column designated aggregate resident for carcinogens and child resident for non-carcinogens and choose the lowest of the two sets. If an industrial scenario is applicable, look under the columns designated general worker, and choose the lowest of the two sets.

If any of the levels are below background or the Method Detection Limit (MDL) any of the latter two will suffice.

If you have any questions, please see me.

Summary of Soil Target Levels

Chemical Name	Soil Target Level (mg/kg) Based on an Excess Cancer Risk of 1E-06			Soil Target Level (mg/kg) Based on a Hazard Index of 1			Soil Target Levels (mg/kg) Based on Leachability
	Aggregate Resident	Child Resident	General Worker	Aggregate Resident	Child Resident	General Worker	
VOCs							
Acetone	ND	ND	ND	7.35E+03	2.70E+03	1.25E+04	6.87E-02
Benzene	2.82E+00	1.02E+01	4.92E+00	ND	ND	ND	2.60E-04
Bromodichloromethane	3.61E+00	6.18E+00	7.57E+00	1.92E+03	6.57E+02	3.35E+03	3.57E-04
2-Butanone	ND	ND	ND	3.30E+04	2.05E+04	4.91E+04	3.60E-02
Ethylbenzene	ND	ND	ND	2.34E+04	6.53E+03	4.43E+04	6.88E-02
Methylene chloride	2.30E+01	6.34E+01	4.22E+01	1.06E+04	3.59E+03	1.85E+04	5.57E-04
Perchloroethylene	1.53E+01	1.61E+01	4.14E+01	3.40E+02	1.44E+02	5.57E+02	2.47E-03
Trichloroethylene	1.34E+01	3.95E+01	2.42E+01	ND	ND	ND	1.04E-03
Xylene (total)	ND	ND	ND	9.43E+04	3.79E+04	1.56E+05	1.15E-02
BNAs							
Acenaphthene	ND	ND	ND	2.02E+04	4.00E+03	4.64E+04	1.86E-01
Acenaphthylene	ND	ND	ND	8.90E+03	2.63E+03	1.63E+04	5.09E-02
Anthracene	ND	ND	ND	8.20E+04	1.83E+04	1.73E+05	5.90E+01
Benzo(a)anthracene	1.51E+00	1.21E+00	5.04E+00	ND	ND	ND	2.76E+01
Benzo(b)fluoranthene	1.50E+00	1.21E+00	5.01E+00	ND	ND	ND	1.10E+01
Benzo(k)fluoranthene	1.50E+00	1.21E+00	4.97E+00	ND	ND	ND	1.10E+01
Benzo(a)pyrene	1.51E-01	1.21E-01	5.04E-01	ND	ND	ND	2.20E+00
Benzo(g,h,i)perylene	ND	ND	ND	1.41E+04	2.26E+03	3.94E+04	3.20E+01
Butylbenzylphthalate	ND	ND	ND	9.35E+04	1.50E+04	2.78E+05	1.11E+00
Carbazole	5.87E+01	4.48E+01	2.24E+02	ND	ND	ND	ND
Chrysene	1.50E+01	1.21E+01	5.03E+01	ND	ND	ND	4.00E+00
Dibenzo(a,h)anthracene	1.51E-01	1.21E-01	5.05E-01	ND	ND	ND	6.60E+01
Dibenzofuran	ND	ND	ND	2.01E+03	3.07E+02	6.40E+03	ND
Fluoranthene	ND	ND	ND	1.82E+04	2.99E+03	4.96E+04	2.13E+01
Fluorene	ND	ND	ND	1.49E+04	2.78E+03	3.60E+04	4.11E+00
n-Hexane	ND	ND	ND	3.02E+04	4.61E+03	9.60E+04	ND
Indeno(1,2,3-c,d)pyrene	1.51E+00	1.21E+00	5.04E+00	ND	ND	ND	3.20E+01
2-Methylnaphthalene	ND	ND	ND	9.00E+02	1.90E+02	2.03E+03	ND
Naphthalene	ND	ND	ND	9.60E-03	2.28E+03	2.00E+04	1.33E-02
Pentachlorophenol	9.68E+00	7.44E+00	3.66E+01	1.49E+04	2.30E+03	4.71E+04	1.06E-01
Phenanthrene	ND	ND	ND	1.47E+04	2.76E+03	3.50E+04	2.81E-01
Pyrene	ND	ND	ND	1.29E+04	2.19E+03	3.38E+04	1.60E+01
Pesticides/Others							
4,4'-DDD	4.78E+00	3.71E+00	1.75E+01	ND	ND	ND	1.54E-01
4,4'-DDE	3.37E+00	2.62E+00	1.24E+01	ND	ND	ND	8.80E-01
DDT	3.23E+00	2.60E+00	1.13E+01	2.31E+02	3.74E+01	6.67E+02	4.86E-02
Chlordane, alpha-	8.80E-01	6.85E-01	3.21E+00	2.93E+01	4.57E+00	8.89E+01	5.60E-01
Chlordane, gamma-	8.80E-01	6.85E-01	3.21E+00	2.93E+01	4.57E+00	8.89E+01	5.60E-01
Dieldrin	7.20E-02	5.59E-02	2.69E-01	2.46E+01	3.82E+00	7.68E+01	3.49E-04
Endrin	ND	ND	ND	1.48E+02	2.29E+01	4.62E+02	6.98E-03
Freon	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	4.85E-02	7.79E-02	1.01E-01	1.19E+00	4.13E-01	2.04E+00	1.07E-04
Toxaphene	4.04E-02	1.67E-01	6.93E-02	ND	ND	ND	6.07E-03
Metals							
Aluminum	ND	ND	ND	ND	ND	ND	ND
Arsenic	7.11E-01	5.20E-01	3.16E+00	1.60E+02	2.34E+01	5.95E+02	ND
Cadmium	6.35E+02	3.18E+03	1.07E+03	2.30E+02	3.75E+01	6.21E+02	ND
Chromium (hexavalent)	9.53E+01	4.77E+02	1.60E+02	1.99E+03	3.59E+02	4.34E+03	ND
Chromium (trivalent)	ND	ND	ND	2.16E+05	5.66E+04	3.06E+05	ND
Cobalt	ND	ND	ND	ND	ND	ND	ND
Copper	ND	ND	ND	1.96E+04	2.88E+03	7.16E+04	ND
Iron	ND	ND	ND	ND	ND	ND	ND
Lead	ND	ND	ND	ND	ND	ND	ND
Manganese	ND	ND	ND	2.15E+03	3.68E+02	5.22E+03	ND
Nickel	1.16E+00	1.01E+00	3.24E+00	8.29E+03	1.45E+03	1.91E+04	ND
Vanadium	ND	ND	ND	2.74E+03	5.00E+02	5.91E+03	ND
Zinc	ND	ND	ND	1.57E+05	2.33E+04	5.51E+05	ND

SOIL CLEAN-UP LEVEL CALCULATIONS & ASSUMPTIONS

Using Inhalation Slope Factor, Cs =

Risk * BW * AT

$$EF*ED*FI*[(SFo*IR*1E-06 kg/mg)+(SFd*SA*AF*ABS*1E-06 kg/mg)+(SFi*InhR*(1/VF+1/PEF))]$$

Using Inhalation Unit Risk, Cs =

Risk * BW * AT

$$EF*ED*FI*[(SFo*IR*1E-06 kg/mg)+(SFd*SA*AF*ABS*1E-06 kg/mg)+(IUR*BW*1000 \mu g/mg*(1/VF+1/PEF))]$$

Using Inhalation Reference Dose, Cs =

Hazard * BW * AT

$$EF*ED*FI*[((1/RfDo)*IR*1E-06 kg/mg)+((1/RfDd)*SA*AF*ABS*1E-06 kg/mg)+((1/RfDi)*InhR*(1/VF+1/PEF))]$$

Using Inhalation Reference Concentration, Cs =

Hazard * BW * AT

$$EF*ED*FI*[((1/RfDo)*IR*1E-06 kg/mg)+((1/RfDd)*SA*AF*ABS*1E-06 kg/mg)+((1/RfCi)*BW*(1/VF+1/PEF))]$$

ASSUMPTIONS

Dermal Contact with Chemicals in Soil (Average)

Assumption	Value	Code	Reference
Chemical Concentration (ppm)	chemical specific	CS	
Surface Area - worker (cm ² /day)	2300	SAw	FDEP Default
Surface Area - aggregate resident (cm ² /day)	4280	SAa	FDEP Default
Surface Area - child resident (cm ² /day)	1800	SAc	FDEP Default
Conversion Factor (kg/mg)	1.00E-06	CFkg/mg	
Conversion Factor (\mu g/mg)	1.00E+03	CF\mu g/mg	
Soil to Skin Adherence Factor-resident (mg/cm ²)	0.2	AFr	FDEP Default
Soil to Skin Adherence Factor-worker (mg/cm ²)	0.6	AFw	FDEP Default
Absorption Factor - organic (unitless)	0.01	ABSo	FDEP Default
Absorption Factor - inorganic (unitless)	0.001	ABSin	FDEP Default
Soil Ingestion Rate - worker (mg/day)	50	IRw	FDEP Default
Soil Ingestion Rate - aggregate resident (mg/day)	120	IRa	FDEP Default
Soil Ingestion Rate - child resident (mg/day)	200	IRc	FDEP Default
Fraction Ingested (unitless)	1	FI	FDEP Default
Inhalation Rate - worker (m ³ /day)	20	InhRw	FDEP Default
Inhalation Rate - aggregate resident (m ³ /day)	20	InhRa	FDEP Default
Inhalation Rate - child resident (m ³ /day)	10	InhRc	
Exposure Frequency - worker (day/yr)	250	EFw	FDEP Default
Exposure Frequency - residents	350	EFr	FDEP Default
Exposure Duration - worker (yr)	25	EDw	FDEP Default
Exposure Duratuon - aggregate resident (yr)	30	EDA	FDEP Default
Exposure Duration - child resident (yr)	6	EDc	FDEP Default
Body Weight - worker (kg)	70	BWw	FDEP Default
Body Weight - aggregate resident (kg)	62	BWa	FDEP Default
Body Weight - child resident (kg)	15	BWc	FDEP Default
Averaging Time - worker, NC (days)	9125	ATwnc	FDEP Default
Averaging Time - aggregate resident (NC) (days)	10950	ATanc	FDEP Default
Averaging Time - child resident (NC) (days)	2190	ATcnc	FDEP Default
Averaging Time - Cancer (days)	25550	ATc	FDEP Default

SOIL CLEAN-UP LEVEL CALCULATIONS & ASSUMPTIONS

VOLATILIZATION MODEL*

Soil-to-air Volatilization Factor (VF)

Assumption

	Exposure	Abbr
Inverse Mean Conc. at Center (g/m ² -s per kg/m ³)	101.8	Q-C95%UCL
Conversion Factor (m ² /cm ²)	0.0001	CFm ² /cm ²
Diffusivity in air (cm ² /sec)	chemical specific	Di
Soil moisture content (cm ³ water/gm soil)	10%	theta
Soil bulk density (gm/cm ³)	1.5	beta
True soil density or particle density (gm/cm ³)	2.65	rho
Total soil porosity (unitless)	0.434	Pt
Air filled soil porosity (unitless)	0.284	Pa
Effective diffusivity (cm ² /sec)	chemical specific	Dei
Organic carbon partition coefficient (cm ³ /g)	chemical specific	Koc
Organic carbon content of soil (fraction)	2%	OC
Soil-water partition coefficient (cm ³ /g)	chemical specific	Kd
Soil-air partition coeff. (g soil/cm ³ air)	chemical specific	Kas
Exposure interval (seconds)	7.90E+08	T
alpha (cm ² /sec)	chemical specific	alpha
Soil-to-air Volatilization Factor (m ³ /kg)	chemical specific	VF

$$Dei (\text{cm}^2/\text{sec}) = Di * [Pa^{(10/3)} / Pt^2]$$

$$Pa (\text{unitless}) = Pt - (\theta * \beta)$$

$$Pt (\text{unitless}) = 1 - (\beta / \rho)$$

$$Kas (\text{g soil/cm}^3 \text{ air}) = Hprime / Kd$$

$$Kd (\text{cm}^3/\text{kg}) = Koc * OC$$

$$\alpha (\text{cm}^2/\text{sec}) = (Dei * Pa) / [Pa + (\rho * ((1 - Pa) / Kas))]$$

$$VF (\text{m}^3/\text{kg}) = \frac{Q-C95\%UCL * CFm^2/cm^2 * [(3.14 * \alpha * T)^{0.5}]}{(2 * Dei * Pa * Kas)}$$

Soil Saturation Concentration (Csat)

UL of soil free moisture (mg/L water)	chemical specific	Cw
Soil Moisture content (kg water/kg soil)	10%	Thetam
Water Solubility (mg/L water)	chemical specific	Schem
Water filled soil porosity (unitless)	0.15	Pw
Henry's Law Constant (atm-m ³ /mol)	chemical specific	Hchem
Henry's Constant Unitless (unitless)	chemical specific	Hprime
Soil Saturation Concentration (mg/kg)	chemical specific	Csat

$$Cw (\text{mg/L water}) = Schem * Thetam$$

$$Pw (\text{unitless}) = Pt * Pa$$

$$Hprime (\text{unitless}) = Hchem * 41$$

$$Csat (\text{mg/kg}) = \frac{[(Kd * Cw * beta) + (Cw * Pw) + (Cw * Hprime * Pa)]}{beta}$$

Particulate Emission Factor (PEF)

Respirable fraction (g/m ² -hr)	0.036	Rf2
Frac. vegetative cover (unitless)	0	Gchem
Mean annual wind speed (m/sec)	4.5	Um
Equiv. threshold value of wind speed at 10m (m/sec)	12.8	Ut
Func. dep. on Um/Ut (unitless)	0.0497	F(x)
Particulate Emission Factor (m ³ /kg)	chemical specific	PEF

$$PEF (\text{m}^3/\text{kg}) = \frac{Q-C95\%UCL * 3600 \text{ sec/hr}}{(Rf^2 * (1 - Gchem) * (Um / Ut)^3 * F(x))}$$

Soil Screening Level Partitioning Equation for Migration to Groundwater

Cw - acceptable concentration in water (mg/l)	chemical specific	ACW
Koc - organic carbon partitioning coefficient (L/kg)	chemical specific	Koc
Foc - fraction of organic carbon in soil (unitless)	2.00E-03	Foc
theta - soil porosity (Lporosity/Lsoil)	5.00E-01	theta2
S - fraction water content (Lwater/Lporo)	3.00E-01	S
SD - soil bulk density (kg/Lsoil)	1.60E+00	SD

$$\text{Screening Level in Soil (mg/kg)} = ACW * [(Koc * Foc) + (theta2 * (S/SD))]$$

Appendix B
Summary of Detected Concentrations

Table 1
Summary of Inorganic Detected Concentrations — Soil (ppm)

	PRGs	Reference (2 X Average Concentration)	36S2501	36S2503	36S2601	36S2603	36S2701	36S2801
Aluminum	230,000.0 ^a	3,833.36	2,000.0 J	1,460.0 J	<u>4,630.0 J</u>	155.0 J	1,710.0 J	1,900.0 J
Arsenic	0.52 ^b	1.56						
Cadmium	39.0 ^a	1.0	0.57		0.27		0.53	
Calcium	NS	912.37						
Cobalt	NS	1.87						
Copper	2,880.0 ^b	5.74						
Cyanide	1,600.0 ^a	0.52	0.09	0.12	0.09		0.12	
Iron	NS	2,745.0	1,730.0 J	1,660.0 J	<u>4,250.0 J</u>		1,530.0 J	1,170.0 J
Lead	400.0 ^c	7.32	<u>30.3</u>		<u>9.7</u>		<u>70.5</u>	<u>15.7</u>
Magnesium	NS	133.33	27.3	29.1	20.0	11.6	66.0	13.4
Manganese	368.0 ^b	21.36	<u>54.3</u>	9.8	<u>89.0</u>		<u>24.8</u>	<u>66.2</u>
Nickel	1.01 ^b	6.38						
Potassium	NS	460.67						
Vanadium	500.0 ^b	5.83	5.2	<u>8.3</u>	<u>13.9</u>		5.3	4.4

Notes appear at end of table.

Table 1 (Continued)
Summary of Detected Concentrations — Soil (ppm)

	PRGs	Reference (2 X Average Concentration)	36S2803	36S2901	36S2903	36S3001	36S3001D	36S3101
Aluminum	230,000.0 ^a	3,833.36	636.0 J	3,510.0 J	512.0 J	841.0 J	1,210.0 J	2,110.0 J
Arsenic	0.52 ^b	1.56						
Cadmium	39.0 ^a	1.0						
Calcium	NS	912.37	867.0	<u>6,650.0</u>				
Cobalt	NS	1.87						
Copper	2,880.0 ^b	5.74						
Cyanide	1,600.0 ^a	0.52		0.21	0.22	0.06		0.07
Iron	NS	2,745.0	916.0 J	<u>4,690.0 J</u>	1,000.0 J	1,570.0 J	1,950.0 J	1,160.0 J
Lead	400.0 ^c	7.32	<u>15.0</u>	<u>17.6</u>	<u>29.1</u>	<u>16.2</u>	<u>16.4</u>	<u>26.3</u>
Magnesium	NS	133.33	10.6	55.4	9.3	21.6	21.4	8.3
Manganese	368.0 ^b	21.36	9.3	<u>51.5</u>		12.5	9.3	13.1
Nickel	1.01 ^b	6.38		1.7				
Potassium	NS	460.67						
Vanadium	500.0 ^b	5.83	1.9	<u>15.8</u>	2.0	4.4	5.1	4.8

Notes appear at end of table.

Table 1 (Continued)
Summary of Detected Concentrations — Soil (ppm)

	PRGs	Reference (2 X Average Concentration)	36S3201	36S3301	36S3303	36S3401	36S3501	36S3503
Aluminum	230,000.0 ^a	3,833.36	1,360.0 J	218.0 J		1,990.0 J	148.0 J	777.0 J
Arsenic	0.52 ^b	1.56						
Cadmium	39.0 ^a	1.0						
Calcium	NS	912.37	<u>4,910.0</u>			<u>10,600.0</u>		<u>4,740.0</u>
Cobalt	NS	1.87						
Copper	2,880.0 ^b	5.74						
Cyanide	1,600.0 ^a	0.52				0.28		0.08
Iron	NS	2,745.0	469.0 J	1,140.0 J		<u>8,870.0 J</u>	2,740.0 J	1,240.0 J
Lead	400.0 ^c	7.32	<u>33.6</u>	<u>167.0</u>		<u>38.7</u>	<u>21.6</u>	<u>19.5</u>
Magnesium	NS	133.33	<u>933.3</u>	32.8		<u>187.0</u>	10.8	37.8
Manganese	368.0 ^b	21.36	<u>48.4</u>	10.3		<u>19.8</u>		8.5
Nickel	1.01 ^b	6.38						
Potassium	NS	460.67						
Vanadium	500.0 ^b	5.83	3.0	0.86		<u>7.1</u>		<u>6.3</u>

Table 1 (Continued)
Summary of Detected Concentrations — Soil (ppm)

	PRGs	Reference (2 X Average Concentration)	36S3601	36S3603
Aluminum	230,000.0 ^a	3,833.36	2,370.0	1,510.0
Arsenic	0.52 ^b	1.56		0.49 J
Cadmium	39.0 ^a	1.0		
Calcium	NS	912.37	<u>2,030.0</u>	<u>1,650.0</u>
Cobalt	NS	1.87	1.0 J	1.5 J
Copper	2,880.0 ^b	5.74	1.1 J	2.0 J
Cyanide	1,600.0 ^a	0.52		
Iron	NS	2,745.0	2,490.0	2,160.0
Lead	400.0 ^c	7.32	<u>12.1</u>	<u>31.2</u>
Magnesium	NS	133.33		
Manganese	368.0 ^b	21.36	<u>38.6</u>	16.6
Mercury	23.0 ^a	0.10		<u>0.15</u>
Nickel	1.01 ^b	6.38		
Potassium	NS	460.67	158.0	
Vanadium	500.0 ^b	5.83		
Zinc	23,300.0 ^b	16.87	5.1	11.1

Notes:

PRG — Preliminary Remedial Goal
a — USEPA Risk Based Concentrations
b — FDEP Cleanup Goals for DOD Sites
c — USEPA Screening Level
NS — No standard established
J — The compound was positively detected; however, the reported concentration is considered an estimated value.

Bold indicates a PRG exceedance.

Underline indicates a reference exceedance

Table 2
Summary of Organic Detected Concentrations — Soil

	PRGs	36S2501	36S2503/RE	36S2601/RE	36S2603	36S2701	36S2801
Pesticides/PCBs (ppb)							
Aroclor 1260	NS						12.0 J
4,4'-DDT	1,900.0*					3.2 J	
Volatile Organic Compounds (ppb)							
Tetrachloroethene	12,000.0*						
Semivolatile Organic Compounds (ppb)							
Benzo(a)anthracene	1,210.0 ^b	230.0 J			810.0		
Benzo(a)pyrene	88.0*	180.0 J			900.0		
Benzo(b)fluoranthene	880.0*	260.0 J			800.0		
Benzo(g,h,i)perylene	2,260,000.0 ^b	73.0 J			370.0		
Benzo(k)fluoranthene	1,210.0 ^b	190.0 J			820.0		
Carbazole	32,000.0*				84.0 J		
Chrysene	12,100.0 ^b	290.0 J			1,100.0		
Dibenz(a,h)anthracene	88.0*				160.0 J		
Fluoranthene	2,990,000.0 ^b	400.0			1,100.0		
Indeno(1,2,3cd)pyrene	880.0*	76.0 J			380.0		
Phenanthrene	2,760,000.0 ^b	80.0 J			320.0 J		
Pyrene	2,190,000.0 ^b	590.0			1,400.0		

Notes appear at end of table.

Table 2 (Continued)
Summary of Organic Detected Concentrations — Soil

	PRG ₆	36S2803	36S2901/RE	36S2903	36S3001/RE	36S3001D/RE	36S3101/RE
Pesticides/PCBs (ppb)							
Aroclor 1260	NS	13.0 J					
4,4'-DDT	1,900.0*						
Volatile Organic Compounds (ppb)							
Tetrachloroethene	12,000.0*		1,100.0	10.0 J			
Semivolatile Organic Compounds (ppb)							
Benzo(a)anthracene	1,210.0 ^b						
Benzo(a)pyrene	88.0*	-					
Benzo(b)fluoranthene	880.0*						
Benzo(g,h,i)perylene	2,260,000.0 ^b						
Benzo(k)fluoranthene	1,210.0 ^b						
Carbazole	32,000.0*						
Chrysene	12,100.0 ^b						
Dibenz(a,h)anthracene	88.0*						
Fluoranthene	2,990,000.0 ^b						
Indeno(1,2,3-cd)pyrene	880.0*						
Phenanthrene	2,760,000.0 ^b						
Pyrene	2,190,000.0 ^b						

Notes appear at end of table.

Table 2 (Continued)
Summary of Organic Detected Concentrations — Soil

	PRGs	36S3201	36S3301/RE	36S3303/RE	36S3401/RE	36S3501	36S3503/RE
Pesticides/PCBs (ppb)							
Aroclor 1260	NS						
4,4'-DDT	1,900.0*	3.9 J					5.0
Volatile Organic Compounds (ppb)							
Tetrachloroethene	12,000.0*						
Semivolatile Organic Compounds (ppb)							
Benzo(a)anthracene	1,210.0 ^b	100.0 J					
Benzo(a)pyrene	88.0*	120.0 J					
Benzo(b)fluoranthene	880.0*	130.0 J					
Benzo(g,h,i)perylene	2,260,000.0 ^b						
Benzo(k)fluoranthene	1,210.0 ^b	170.0 J					
Carbazole	32,000.0*						
Chrysene	12,100.0 ^b	120.0 J					
Dibenz(a,h)anthracene	88.0*						
Fluoranthene	2,990,000.0 ^b	170.0 J					
Indeno(1,2,3-cd)pyrene	880.0*						
Phenanthrene	2,760,000.0 ^b						
Pyrene	2,190,000.0 ^b	190.0 J					

Table 2 (Continued)
Summary of Organic Detected Concentrations — Soil

	PRGS	36S3601	36S3603
Pesticides/PCBs (ppb)			
Aroclor 1260	NS		
4,4'-DDT	1,900.0*		
Volatile Organic Compounds (ppb)			
Tetrachloroethene	12,000.0*		
Semivolatile Organic Compounds (ppb)			
Benzo(a)anthracene	1,210.0 ^b		
Benzo(a)pyrene	88.0*		
Benzo(b)fluoranthene	880.0*		
Benzo(g,h,i)perylene	2,260,000.0 ^b		
Benzo(k)fluoranthene	1,210.0 ^b		
Carbazole	32,000.0*		
Chrysene	12,100.0 ^b		
Dibenz(a,h)anthracene	88.0*		
Fluoranthene	2,990,000.0 ^b	54.0 J	
Indeno(1,2,3-cd)pyrene	880.0*		
Phenanthrene	2,760,000.0 ^b		
Pyrene	2,190,000.0 ^b	45.0 J	

Notes:

PRG — Preliminary Remediation Goals
RE — Semivolatile organic analyses were reanalyzed by the laboratory.
a — USEPA Risk Based Concentrations
b — FDEP Cleanup Goals for DOD Sites
NS — No standard established
J — The compound was positively detected; however, the reported concentration is considered an estimated value.

Bold indicates a PRG exceedance.

Appendix C
Database Summary of Analytical Results

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SAMPLES

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CT808	SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0026-01	036-S-0026-03	036-S-0027-01	036-S-0028-01
	ORIGINAL ID ----->	36S2501	36S2503	36S2601	36S2603	36S2701	36S2801
	LAB SAMPLE ID ----->	40733-014	40733-015	40733-016	40733-017	40733-018	40748-038
	LAB REC DATE ----->	06/29/94	06/29/94	06/29/94	06/29/94	06/29/94	06/30/94
	UNITS ----->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Method	Parameter						
CYANIDE	Cyanide	0.0900	0.1200	0.0900	0.0600 U	0.1200	0.0600 U

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SAMPLES

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CT808	SAMPLE ID ----->	036-S-0028-03	036-S-0029-01	036-S-0029-03	036-S-0030-01	036-C-0030-01	036-S-0031-01
	ORIGINAL ID ----->	36S2803	36S2901	36S2903	36S3001	36S3001D	36S3101
	LAB SAMPLE ID ---->	40748-039	40748-036	40748-037	40748-032	40748-033	40748-034
	LAB REC DATE ---->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
	UNITS ----->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Method	Parameter						
CYANIDE	Cyanide	0.0600 U	0.2100	0.2200	0.0600	0.0800 U	0.0700

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SAMPLES

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CT808	SAMPLE ID ----->	036-S-0032-01	036-S-0033-01	036-S-0033-03	036-S-0034-01	036-S-0035-01	036-S-0035-03
	ORIGINAL ID ----->	36S3201	36S3301	36S3303	36S3401	36S3501	36S3503
	LAB SAMPLE ID ---->	40748-035	40748-027	40748-028	40748-029	40748-030	40748-031
	LAB REC DATE ----->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
	UNITS ----->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Method	Parameter						
CYANIDE	Cyanide	0.0700 U	0.0700 U	0.0700 U	0.2800	0.0700 U	0.0800

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CT808	SAMPLE ID ----->	036-G-GE10-00	036-G-GI10-00				
	ORIGINAL ID ----->	36GE10	36G110				
	LAB SAMPLE ID ----->	40733-023	40733-024				
	LAB REC DATE ----->	06/29/94	06/29/94				
	UNITS ----->	UG/L	UG/L				
Method	Parameter						
CYANIDE	Cyanide	0.7500 U	0.7500 U				

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SAMPLES

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CT808		SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0026-01	036-S-0026-03	036-S-0027-01	036-S-0028-01
Method	Parameter	ORIGINAL ID ----->	36S2501	36S2503	36S2601	36S2603	36S2701	36S2801
METAL	Aluminum	2000.0000 J	1460.0000 J	4630.0000 J	155.0000 J	1710.0000 J	1900.0000 J	
METAL	Antimony	2.1000 U	2.4000 U	2.2000 U	2.7000 U	2.7000 U	2.5000 U	
METAL	Arsenic	0.5400 U	0.6600 U	1.6000 U	0.4300 U	0.4500 U	0.4600 U	
METAL	Barium	3.9000 U	3.0000 U	3.0000 U	0.4400 U	2.7000 U	6.0000 U	
METAL	Beryllium	0.0500 U	0.0500 U	0.0500 U	0.0600 U	0.0600 U	0.0600 U	
METAL	Cadmium	0.5700	0.2900 U	0.2700	0.3200 U	0.5300	0.3100 U	
METAL	Calcium	288.0000 U	360.0000 U	211.0000 U	35.3000 U	378.0000 U	374.0000 U	
METAL	Chromium	3.6000 U	2.8000 U	5.6000 U	0.4900 U	3.2000 U	2.4000 U	
METAL	Cobalt	0.4400 U	0.5100 U	0.6100 U	0.5700 U	0.5700 U	0.5400 U	
METAL	Copper	1.2000 U	0.5100 U	1.7000 U	0.5300 U	3.2000 U	1.3000 U	
METAL	Iron	1730.0000 J	1660.0000 J	4250.0000 J	141.0000 U	1530.0000 J	1170.0000 J	
METAL	Lead	30.3000	9.4000 U	9.7000	2.3000 U	70.5000	15.7000	
METAL	Magnesium	27.3000	29.1000	20.0000	11.6000	66.0000	13.4000	
METAL	Manganese	54.3000	9.8000	89.0000	4.6000 U	24.8000	66.2000	
METAL	Mercury	0.0100 U	0.0400 U	0.0300 U	0.0400 U	0.0400 U	0.0300 U	
METAL	Nickel	1.1000 U	1.2000 U	1.2000 U	1.4000 U	1.4000 U	1.3000 U	
METAL	Potassium	88.0000 U	89.3000 U	85.2000 U	99.8000 U	101.0000 U	94.9000 U	
METAL	Selenium	0.4900 U	0.5600 U	0.5200 U	0.6300 U	0.6300 U	0.6000 U	
METAL	Silver	0.4200 U	0.4900 U	0.4500 U	0.5500 U	0.5500 U	0.5200 U	
METAL	Sodium	3.3000 U	3.7000 U	4.2000 U	3.1000 U	3.7000 U	3.9000 U	
METAL	Thallium	0.4900 U	0.5600 U	0.5200 U	0.6300 U	0.6300 U	0.6000 U	
METAL	Vanadium	5.2000	8.3000	13.9000	0.7100 U	5.3000	4.4000	
METAL	Zinc	8.8000 U	1.7000 U	9.7000 U	0.8000 U	12.8000 U	4.4000 U	

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CT808		SAMPLE ID ----->	036-S-0028-03	036-S-0029-01	036-S-0029-03	036-S-0030-01	036-C-0030-01	036-S-0031-01
Method	Parameter							
METAL	Aluminum		636.0000 J	3510.0000 J	512.0000 J	841.0000 J	1210.0000 J	2110.0000 J
METAL	Antimony		2.7000 U	2.9000 U	2.6000 U	2.4000 U	2.1000 U	2.2000 U
METAL	Arsenic		0.4300 U	1.4000 U	0.4200 U	0.3800 U	0.6600 U	0.3800 U
METAL	Barium		1.9000 U	6.9000 U	2.2000 U	1.6000 U	1.5000 U	1.2000 U
METAL	Beryllium		0.0600 U	0.0700 U	0.0600 U	0.0500 U	0.0500 U	0.0500 U
METAL	Cadmium		0.3300 U	0.3600 U	0.3200 U	0.2900 U	0.2600 U	0.2700 U
METAL	Calcium		867.0000	6650.0000	236.0000 U	228.0000 U	220.0000 U	143.0000 U
METAL	Chromium		2.3000 U	5.5000 U	1.5000 U	1.9000 U	2.3000 U	2.9000 U
METAL	Cobalt		0.5800 U	0.6200 U	0.5500 U	0.8400 U	0.7300 U	0.4800 U
METAL	Copper		0.6100 U	1.5000 U	2.2000 U	0.5600 U	0.9200 U	1.3000 U
METAL	Iron		916.0000 J	4690.0000 J	1000.0000 J	1570.0000 J	1950.0000 J	1160.0000 J
METAL	Lead		15.0000	17.6000	29.1000	16.2000	16.4000	26.3000
METAL	Magnesium		10.6000	55.4000	9.3000	21.6000	21.4000	8.3000
METAL	Manganese		9.3000	51.5000	3.2000 U	12.5000	9.3000	13.1000
METAL	Mercury		0.0300 U	0.1100 U	0.0700 U	0.0500 U	0.0400 U	0.0300 U
METAL	Nickel		1.4000 U	1.7000	1.4000 U	1.3000 U	1.1000 U	1.2000 U
METAL	Potassium		102.0000 U	123.0000 U	111.0000 U	90.1000 U	80.3000 U	112.0000 U
METAL	Selenium		0.6400 U	0.6900 U	0.6100 U	0.5700 U	0.5100 U	0.5300 U
METAL	Silver		0.5600 U	0.6000 U	0.5300 U	0.4900 U	0.4400 U	0.4600 U
METAL	Sodium		7.3000 U	20.0000 U	3.0000 U	8.5000 U	9.1000 U	4.8000 U
METAL	Thallium		0.6400 U	0.6900 U	0.6100 U	0.5700 U	0.5100 U	0.5300 U
METAL	Vanadium		1.9000	15.8000	2.0000	4.4000	5.1000	4.8000
METAL	Zinc		3.5000 U	6.1000 U	2.7000 U	7.0000 U	7.1000 U	6.5000 U

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CT808		SAMPLE ID ----->	036-S-0032-01	036-S-0033-01	036-S-0033-03	036-S-0034-01	036-S-0035-01	036-S-0035-03
Method	Parameter							
METAL	Aluminum		1360.0000 J	218.0000 J	19.2000 U	1990.0000 J	148.0000 J	777.0000 J
METAL	Antimony		2.7000 U	2.1000 U	2.1000 U	2.4000 U	2.8000 U	2.3000 U
METAL	Arsenic		0.4900 U	0.3300 U	0.3400 U	1.3000 U	0.4500 U	0.3700 U
METAL	Barium		9.0000 U	21.6000 U	1.6000 U	33.0000 U	1.6000 U	2.8000 U
METAL	Beryllium		0.1500 U	0.0500 U	0.0500 U	0.1000 U	0.0600 U	0.0500 U
METAL	Cadmium		0.3300 U	0.2500 U	0.2600 U	0.4600 U	0.3400 U	0.2800 U
METAL	Calcium		4910.0000	741.0000 U	47.2000 U	10600.0000	269.0000 U	4740.0000
METAL	Chromium		1.5000 U	0.5500 U	0.4600 U	5.1000 U	0.6200 U	1.9000 U
METAL	Cobalt		1.8000 U	4.2000	0.4500 U	5.2000	6.2000 U	0.6500
METAL	Copper		3.9000 U	1.1000 U	0.4200 U	10.2000 U	0.5600 U	0.4600 U
METAL	Iron		469.0000 J	1140.0000 J	37.4000 U	2870.0000 J	274.0000 J	1240.0000 J
METAL	Lead		33.6000	167.0000	6.7000 U	38.7000	21.6000	19.5000
METAL	Magnesium		953.0000	32.8000	3.9000 U	187.0000	10.8000	37.8000
METAL	Manganese		48.4000	10.3000	1.8000 U	19.8000	1.2000 U	8.5000
METAL	Mercury		0.0600 U	0.0300 U	0.0400 U	0.0500 U	0.0400 U	0.0300 U
METAL	Nickel		1.4000 U	1.1000 U	1.1000 U	1.9000 U	1.5000 U	1.3000 U
METAL	Potassium		276.0000 U	77.2000 U	79.3000 U	240.0000 U	106.0000 U	87.1000 U
METAL	Selenium		0.6300 U	0.4900 U	0.5000 U	0.5800 U	0.6600 U	0.5500 U
METAL	Silver		0.5500 U	0.4200 U	0.4300 U	0.5000 U	0.5800 U	0.4800 U
METAL	Sodium		28.3000 U	18.5000 U	2.5000 U	27.1000 U	8.9000 U	4.1000 U
METAL	Thallium		0.6300 U	0.4900 U	0.5000 U	0.5800 U	0.6600 U	0.5500 U
METAL	Vanadium		3.0000	0.8600	0.5600 U	7.1000	0.7500 U	6.3000
METAL	Zinc		14.3000 U	16.3000 U	2.3000 U	36.8000 U	2.9000 U	4.1000 U

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CT808	SAMPLE ID ----->	036-G-GE10-00	036-G-GI10-00				
	ORIGINAL ID ----->	36GE10	36G110				
	LAB SAMPLE ID --->	40733-023	40733-024				
	LAB REC DATE ----->	06/29/94	06/29/94				
	UNITS ----->	UG/L	UG/L				
Method	Parameter						
METAL	Aluminum	30.0000 J	27.3000 J				
METAL	Antimony	13.1000 U	13.1000 U				
METAL	Arsenic	2.1000 U	2.1000 U				
METAL	Barium	2.4000 J	5.9000 J				
METAL	Beryllium	0.3000 U	0.3000 U				
METAL	Cadmium	1.6000 U	1.6000 U				
METAL	Calcium	81.0000 J	262.0000 J				
METAL	Chromium	2.4000 U	2.4000 U				
METAL	Cobalt	2.8000 U	2.8000 U				
METAL	Copper	2.6000 U	2.6000 U				
METAL	Iron	12.8000 J	12.7000 J				
METAL	Lead	0.9000 U	0.9000 U				
METAL	Magnesium	24.2000 U	24.2000 U				
METAL	Manganese	0.6000 U	1.1000 J				
METAL	Mercury	0.1000 U	0.1000 U				
METAL	Nickel	6.9000 U	7.2000 J				
METAL	Potassium	493.0000 U	493.0000 U				
METAL	Selenium	3.1000 U	3.1000 U				
METAL	Silver	2.7000 U	2.7000 U				
METAL	Sodium	23.4000 J	35.9000 J				
METAL	Thallium	3.1000 U	3.1000 U				
METAL	Vanadium	3.5000 U	3.5000 U				
METAL	Zinc	8.1000 J	8.0000 J				

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CT808		SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0026-01	036-S-0026-03	036-S-0027-01	036-S-0028-01
Method	Parameter							
PEST	Heptachlor epoxide		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	Endosulfan sulfate		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	Aroclor 1260		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	12.0000 J
PEST	Aroclor 1254		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	37.0000 U
PEST	Aroclor 1221		71.0000 U	74.0000 U	74.0000 U	71.0000 U	77.0000 U	75.0000 U
PEST	Aroclor 1232		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	37.0000 U
PEST	Aroclor 1248		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	37.0000 U
PEST	Aroclor 1016		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	37.0000 U
PEST	Aldrin		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	alpha-BHC		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	beta-BHC		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	delta-BHC		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	Endosulfan II		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	4,4'-DDT		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.2000 J	3.7000 U
PEST	alpha-Chlordane		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	gamma-Chlordane		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	Aroclor 1242		35.0000 U	36.0000 U	36.0000 U	35.0000 U	38.0000 U	37.0000 U
PEST	Endrin ketone		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	gamma-BHC (Lindane)		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	Dieldrin		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	Endrin		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	Methoxychlor		18.0000 U	19.0000 U	19.0000 U	18.0000 U	20.0000 U	19.0000 U
PEST	4,4'-DDD		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	4,4'-DDE		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	Endrin aldehyde		3.5000 U	3.6000 U	3.6000 U	3.5000 U	3.8000 U	3.7000 U
PEST	Heptachlor		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U
PEST	Toxaphene		180.0000 U	190.0000 U	190.0000 U	180.0000 U	200.0000 U	190.0000 U
PEST	Endosulfan I		1.8000 U	1.9000 U	1.9000 U	1.8000 U	2.0000 U	1.9000 U

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CT808		SAMPLE ID ----->	036-S-0028-03	036-S-0029-01	036-S-0029-03	036-S-0030-01	036-C-0030-01	036-S-0031-01
Method	Parameter							
PEST	Heptachlor epoxide		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	Endosulfan sulfate		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	Aroclor 1260		13.0000 J	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Aroclor 1254		35.0000 U	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Aroclor 1221		71.0000 U	75.0000 U	74.0000 U	77.0000 U	76.0000 U	79.0000 U
PEST	Aroclor 1232		35.0000 U	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Aroclor 1248		35.0000 U	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Aroclor 1016		35.0000 U	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Aldrin		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	alpha-BHC		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	beta-BHC		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	delta-BHC		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	Endosulfan II		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	4,4'-DDT		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	alpha-Chlordane		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	gamma-Chlordane		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	Aroclor 1242		35.0000 U	37.0000 U	36.0000 U	38.0000 U	38.0000 U	39.0000 U
PEST	Endrin ketone		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	gamma-BHC (Lindane)		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	Dieldrin		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	Endrin		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	Methoxychlor		18.0000 U	19.0000 U	19.0000 U	20.0000 U	19.0000 U	20.0000 U
PEST	4,4'-DDD		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	4,4'-DDE		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	Endrin aldehyde		3.5000 U	3.7000 U	3.6000 U	3.8000 U	3.8000 U	3.9000 U
PEST	Heptachlor		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U
PEST	Toxaphene		180.0000 U	190.0000 U	190.0000 U	200.0000 U	190.0000 U	200.0000 U
PEST	Endosulfan I		1.8000 U	1.9000 U	1.9000 U	2.0000 U	1.9000 U	2.0000 U

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CT808		SAMPLE ID -----> 036-K-0031-01MS	036-X-0031-01MSD	036-S-0032-01	036-G-0033-01	036-S-0033-03	036-S-0034-01
Method	Parameter						
PEST	Heptachlor epoxide	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	Endosulfan sulfate	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	Aroclor 1260	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Aroclor 1254	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Aroclor 1221	79.0000 U	79.0000 U	81.0000 U	78.0000 U	79.0000 U	82.0000 U
PEST	Aroclor 1232	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Aroclor 1248	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Aroclor 1016	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Aldrin	11.0000 J	9.4000 J	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	alpha-BHC	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	beta-BHC	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	delta-BHC	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	Endosulfan II	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	4,4'-DDT	31.0000	34.0000	3.9000 J	3.8000 U	3.9000 U	4.0000 U
PEST	alpha-Chlordane	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	gamma-Chlordane	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	Aroclor 1242	39.0000 U	39.0000 U	40.0000 U	38.0000 U	39.0000 U	40.0000 U
PEST	Endrin ketone	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	gamma-BHC (Lindane)	16.0000	12.0000 J	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	Dieldrin	30.0000	29.0000	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	Endrin	33.0000	31.0000	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	Methoxychlor	20.0000 U	20.0000 U	21.0000 U	20.0000 U	20.0000 U	21.0000 U
PEST	4,4'-DDD	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	4,4'-DDE	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	Endrin aldehyde	3.9000 U	3.9000 U	4.0000 U	3.8000 U	3.9000 U	4.0000 U
PEST	Heptachlor	14.0000	13.0000 J	2.1000 U	2.0000 U	2.0000 U	2.1000 U
PEST	Toxaphene	200.0000 U	200.0000 U	210.0000 U	200.0000 U	200.0000 U	210.0000 U
PEST	Endosulfan I	2.0000 U	2.0000 U	2.1000 U	2.0000 U	2.0000 U	2.1000 U

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CT808	SAMPLE ID ----->	036-S-0035-01	036-S-0035-03	036-K-OLCS-01MS	036-X-OLCS-01MSD	036-K-OLCS-02MS	036-X-OLCS-02MSD
Method	Parameter						
PEST	Heptachlor epoxide	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	Endosulfan sulfate	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.6000 U	3.3000 U
PEST	Aroclor 1260	40.0000 U	38.0000 U	1.0000 U	1.0000 U	36.0000 U	33.0000 U
PEST	Aroclor 1254	40.0000 U	38.0000 U	3.3000 J	3.3000 J	140.0000 J	140.0000
PEST	Aroclor 1221	81.0000 U	76.0000 U	2.0000 U	2.0000 U	73.0000 U	67.0000 U
PEST	Aroclor 1232	40.0000 U	38.0000 U	1.0000 U	1.0000 U	36.0000 U	33.0000 U
PEST	Aroclor 1248	40.0000 U	38.0000 U	1.0000 U	1.0000 U	36.0000 U	33.0000 U
PEST	Aroclor 1016	40.0000 U	38.0000 U	1.0000 U	1.0000 U	36.0000 U	33.0000 U
PEST	Aldrin	2.1000 U	1.9000 U	0.0500 U	0.0500 U	10.0000	11.0000
PEST	alpha-BHC	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	beta-BHC	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	delta-BHC	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	Endosulfan II	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.6000 U	3.3000 U
PEST	4,4'-DDT	4.0000 U	5.0000	0.6400 J	0.7200	28.0000 J	36.0000 J
PEST	alpha-Chlordane	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	gamma-Chlordane	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U
PEST	Aroclor 1242	40.0000 U	38.0000 U	1.0000 U	1.0000 U	36.0000 U	33.0000 U
PEST	Endrin ketone	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.6000 U	3.3000 U
PEST	gamma-BHC (Lindane)	2.1000 U	1.9000 U	0.0500 U	0.0500 U	11.0000	13.0000
PEST	Dieldrin	4.0000 U	3.8000 U	0.1000 U	0.1000 U	23.0000	28.0000
PEST	Endrin	4.0000 U	3.8000 U	0.1000 U	0.1000 U	24.0000 J	30.0000
PEST	Methoxychlor	21.0000 U	19.0000 U	0.5000 U	0.5000 U	18.0000 U	17.0000 U
PEST	4,4'-DDD	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.6000 U	3.3000 U
PEST	4,4'-DDE	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.3000 J	3.3000 J
PEST	Endrin aldehyde	4.0000 U	3.8000 U	0.1000 U	0.1000 U	3.6000 U	3.3000 U
PEST	Heptachlor	2.1000 U	1.9000 U	0.3100	0.3200	10.0000 J	11.0000 J
PEST	Toxaphene	210.0000 U	190.0000 U	5.0000 U	5.0000 U	180.0000 U	170.0000 U
PEST	Endosulfan I	2.1000 U	1.9000 U	0.0500 U	0.0500 U	1.8000 U	1.7000 U

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CT808		SAMPLE ID ----->	036-E-GE10-00	036-G-GI10-00	PBL-T-T808-01	PBL-T-T808-02	PIB-T-T808-03	PIB-T-T808-04
Method	Parameter							
PEST	Heptachlor epoxide		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	Endosulfan sulfate		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	Aroclor 1260		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Aroclor 1254		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Aroclor 1221		2.1000 U	2.1000 U	2.0000 U	73.0000 U	1.0000 U	1.0000 U
PEST	Aroclor 1232		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Aroclor 1248		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Aroclor 1016		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Aldrin		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	alpha-BHC		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	beta-BHC		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	delta-BHC		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	Endosulfan II		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	4,4'-DDT		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	alpha-Chlordane		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	gamma-Chlordane		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	Aroclor 1242		1.0000 U	1.1000 U	1.0000 U	36.0000 U	0.5000 U	0.5000 U
PEST	Endrin ketone		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	gamma-BHC (Lindane)		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	Dieldrin		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	Endrin		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	Methoxychlor		0.5200 U	0.5300 U	0.5000 U	18.0000 U	0.2500 U	0.2500 U
PEST	4,4'-DDD		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	4,4'-DDE		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	Endrin aldehyde		0.1000 U	0.1100 U	0.1000 U	3.6000 U	0.0500 U	0.0500 U
PEST	Heptachlor		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U
PEST	Toxaphene		5.2000 U	5.3000 U	5.0000 U	180.0000 U	2.5000 U	2.5000 U
PEST	Endosulfan I		0.0520 U	0.0530 U	0.0500 U	1.8000 U	0.0250 U	0.0250 U

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CTB08		SAMPLE ID ----->	PIB-T-T808-05	PIB-T-T808-06	PIB-T-T808-07	PIB-T-T808-08	PIB-T-T808-09	PIB-T-T808-10
Method	Parameter	ORIGINAL ID ----->	PIBLK05	PIBLK06	PIBLK07	PIBLK08	PIBLK09	PIBLK10
LAB SAMPLE ID ---->	LAB REC DATE ---->	UNITS ----->	PIBLK05	PIBLK06	PIBLK07	PIBLK08	PIBLK09	PIBLK10
/ /	/ /	UG/L	/ /	UG/L	/ /	UG/L	/ /	UG/L
PEST	Heptachlor epoxide		0.0250 U					
PEST	Endosulfan sulfate		0.0500 U					
PEST	Aroclor 1260		0.5000 U					
PEST	Aroclor 1254		0.5000 U					
PEST	Aroclor 1221		1.0000 U					
PEST	Aroclor 1232		0.5000 U					
PEST	Aroclor 1248		0.5000 U					
PEST	Aroclor 1016		0.5000 U					
PEST	Aldrin		0.0250 U					
PEST	alpha-BHC		0.0250 U					
PEST	beta-BHC		0.0250 U					
PEST	delta-BHC		0.0250 U					
PEST	Endosulfan II		0.0500 U					
PEST	4,4'-DDT		0.0500 U					
PEST	alpha-Chlordane		0.0250 U					
PEST	gamma-Chlordane		0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0200 U	0.0250 U
PEST	Aroclor 1242		0.5000 U					
PEST	Endrin ketone		0.0500 U					
PEST	gamma-BHC (Lindane)		0.0250 U					
PEST	Dieldrin		0.0500 U					
PEST	Endrin		0.0500 U					
PEST	Methoxychlor		0.2500 U					
PEST	4,4'-DDD		0.0500 U					
PEST	4,4'-DDE		0.0500 U					
PEST	Endrin aldehyde		0.0500 U					
PEST	Heptachlor		0.0250 U					
PEST	Toxaphene		2.5000 U					
PEST	Endosulfan I		0.0250 U					

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CT808		SAMPLE ID ----->	PIB-T-T808-11	PIB-T-T808-12	PIB-T-T808-13	PIB-T-T808-14	PIB-T-T808-15	
Method	Parameter							
PEST	Heptachlor epoxide		0.0250 U					
PEST	Endosulfan sulfate		0.0500 U					
PEST	Aroclor 1260		0.5000 U					
PEST	Aroclor 1254		0.5000 U					
PEST	Aroclor 1221		1.0000 U					
PEST	Aroclor 1232		0.5000 U					
PEST	Aroclor 1248		0.5000 U					
PEST	Aroclor 1016		0.5000 U					
PEST	Aldrin		0.0250 U					
PEST	alpha-BHC		0.0250 U					
PEST	beta-BHC		0.0250 U					
PEST	delta-BHC		0.0250 U					
PEST	Endosulfan II		0.0500 U					
PEST	4,4'-DDT		0.0500 U					
PEST	alpha-Chlordane		0.0250 U					
PEST	gamma-Chlordane		0.0250 U					
PEST	Aroclor 1242		0.5000 U					
PEST	Endrin ketone		0.0500 U					
PEST	gamma-BHC (Lindane)		0.0250 U					
PEST	Dieldrin		0.0500 U					
PEST	Endrin		0.0500 U					
PEST	Methoxychlor		0.2500 U					
PEST	4,4'-DDD		0.0500 U					
PEST	4,4'-DDE		0.0500 U					
PEST	Endrin aldehyde		0.0500 U					
PEST	Heptachlor		0.0250 U					
PEST	Toxaphene		2.5000 U					
PEST	Endosulfan I		0.0250 U					

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CT808		SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0025-03RE	036-S-0026-01	036-S-0026-01RE	036-S-0026-03
Method	Parameter							
SVOA	Phenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	bis(2-chloroethyl)ether		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2-Chlorophenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	1,3-Dichlorobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	1,4-Dichlorobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	1,2-Dichlorobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2-Methylphenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	bis(2-chloroisopropyl)ether		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Methylphenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	N-Nitroso-di-n-propylamine		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Hexachloroethane		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Nitrobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Isophorone		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2-Nitrophenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,4-Dimethylphenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	bis(2-Chloroethoxy)methane		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,4-Dichlorophenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	1,2,4-Trichlorobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Naphthalene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Chloroaniline		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Hexachlorobutadiene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Chloro-3-methylphenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2-Methylnaphthalene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Hexachlorocyclopentadiene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,4,6-Trichlorophenol		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,4,5-Trichlorophenol		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	2-Chloronaphthalene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2-Nitroaniline		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	Dimethylphthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Acenaphthylene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,6-Dinitrotoluene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	3-Nitroaniline		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	Acenaphthene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U

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CT808		SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0025-03RE	036-S-0026-01	036-S-0026-01RE	036-S-0026-03
Method	Parameter							
SVOA	2,4-Dinitrophenol		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	4-Nitrophenol		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	Dibenzofuran		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	2,4-Dinitrotoluene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Diethylphthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Chlorophenyl-phenylether		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Fluorene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Nitroaniline		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	4,6-Dinitro-2-methylphenol		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	N-Nitrosodiphenylamine		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	4-Bromophenyl-phenylether		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Hexachlorobenzene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Pentachlorophenol		830.0000 U	870.0000 U	870.0000 U	880.0000 U	880.0000 U	840.0000 U
SVOA	Phenanthrene		80.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	320.0000 J
SVOA	Anthracene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Carbazole		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	84.0000 J
SVOA	Di-n-butylphthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Fluoranthene		400.0000	360.0000 U	360.0000 U	360.0000 U	360.0000 U	1100.0000
SVOA	Pyrene		590.0000	360.0000 U	360.0000 U	360.0000 U	360.0000 U	1400.0000
SVOA	Butylbenzylphthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	3,3'-Dichlorobenzidine		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Benzo(a)anthracene		230.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	810.0000
SVOA	Chrysene		290.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	1100.0000
SVOA	bis(2-Ethylhexyl)phthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Di-n-octylphthalate		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	350.0000 U
SVOA	Benzo(b)fluoranthene		260.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	800.0000
SVOA	Benzo(k)fluoranthene		190.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	820.0000
SVOA	Benzo(a)pyrene		180.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	900.0000
SVOA	Indeno(1,2,3-cd)pyrene		76.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	380.0000
SVOA	Dibenzo(a,h)anthracene		340.0000 U	360.0000 U	360.0000 U	360.0000 U	360.0000 U	160.0000 J
SVOA	Benzo(g,h,i)perylene		73.0000 J	360.0000 U	360.0000 U	360.0000 U	360.0000 U	370.0000

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CT808		SAMPLE ID ----->	036-S-0027-01	036-S-0027-01RE	036-S-0028-01	036-S-0028-03	036-S-0029-01	036-S-0029-01RE
Method	Parameter							
SVOA	Phenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	bis(2-chloroethyl)ether		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2-Chlorophenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	1,3-Dichlorobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	1,4-Dichlorobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	1,2-Dichlorobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2-Methylphenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	bis(2-chloroisopropyl)ether		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Methylphenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	N-Nitroso-di-n-propylamine		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Hexachloroethane		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Nitrobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Isophorone		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2-Nitrophenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,4-Dimethylphenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	bis(2-Chloroethoxy)methane		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,4-Dichlorophenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	1,2,4-Trichlorobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Naphthalene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Chloroaniline		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Hexachlorobutadiene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Chloro-3-methylphenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2-Methylnaphthalene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Hexachlorocyclopentadiene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,4,6-Trichlorophenol		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,4,5-Trichlorophenol		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	2-Chloronaphthalene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2-Nitroaniline		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	Dimethylphthalate		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Acenaphthylene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,6-Dinitrotoluene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	3-Nitroaniline		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	Acenaphthene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U

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CT808		SAMPLE ID ----->	036-S-0027-01	036-S-0027-01RE	036-S-0028-01	036-S-0028-03	036-S-0029-01	036-S-0029-01RE
Method	Parameter							
SVOA	2,4-Dinitrophenol		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	4-Nitrophenol		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	Dibenzofuran		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	2,4-Dinitrotoluene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Diethylphthalate		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Chlorophenyl-phenylether		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Fluorene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Nitroaniline		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	4,6-Dinitro-2-methylphenol		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	N-Nitrosodiphenylamine		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	4-Bromophenyl-phenylether		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Hexachlorobenzene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Pentachlorophenol		910.0000 U	910.0000 U	870.0000 U	830.0000 U	890.0000 U	890.0000 U
SVOA	Phenanthrene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Anthracene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Carbazole		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Di-n-butylphthalate		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Fluoranthene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Pyrene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Butylbenzylphthalate		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	3,3'-Dichlorobenzidine		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(a)anthracene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Chrysene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	bis(2-Ethylhexyl)phthalate		370.0000 U	370.0000 U	87.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Di-n-octylphthalate		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(b)fluoranthene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(k)fluoranthene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(a)pyrene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Indeno(1,2,3-cd)pyrene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Dibenz(a,h)anthracene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(g,h,i)perylene		370.0000 U	370.0000 U	360.0000 U	340.0000 U	370.0000 U	370.0000 U

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CT808		SAMPLE ID -----> 036-S-0029-03	036-S-0030-01	036-C-0030-01	036-S-0030-01RE	036-C-0030-01RE	036-S-0031-01
Method	Parameter						
SVOA	Phenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	bis(2-chloroethyl)ether	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2-Chlorophenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	1,3-Dichlorobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	1,4-Dichlorobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	1,2-Dichlorobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2-Methylphenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	bis(2-chloroisopropyl)ether	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Methylphenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	N-Nitroso-di-n-propylamine	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Hexachloroethane	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Nitrobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Isophorone	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2-Nitrophenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,4-Dimethylphenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	bis(2-Chloroethoxy)methane	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,4-Dichlorophenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	1,2,4-Trichlorobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Naphthalene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Chloroaniline	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Hexachlorobutadiene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Chloro-3-methylphenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2-Methylnaphthalene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Hexachlorocyclopentadiene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,4,6-Trichlorophenol	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,4,5-Trichlorophenol	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	2-Chloronaphthalene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2-Nitroaniline	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	Dimethylphthalate	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Acenaphthylene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,6-Dinitrotoluene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	3-Nitroaniline	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	Acenaphthene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U

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CT808	SAMPLE ID ----->	036-S-0029-03	036-S-0030-01	036-C-0030-01	036-S-0030-01RE	036-C-0030-01RE	036-S-0031-01
	ORIGINAL ID ----->	36S2903	36S3001	36S3001D	36S3001RE	36S3001DRE	36S3101
	LAB SAMPLE ID ---->	40748-24	40748-19	40748-20	40748-19RE	40748-20RE	40748-21
	LAB REC DATE ---->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
	UNITS ----->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Method	Parameter						
SVOA	2,4-Dinitrophenol	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	4-Nitrophenol	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	Dibenzofuran	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	2,4-Dinitrotoluene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Diethylphthalate	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Chlorophenyl-phenylether	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Fluorene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Nitroaniline	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	4,6-Dinitro-2-methylphenol	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	N-Nitrosodiphenylamine	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	4-Bromophenyl-phenylether	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Hexachlorobenzene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Pentachlorophenol	870.0000 U	900.0000 U	910.0000 U	900.0000 U	910.0000 U	930.0000 U
SVOA	Phenanthrene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Anthracene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Carbazole	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Di-n-butylphthalate	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Fluoranthene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Pyrene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Butylbenzylphthalate	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	3,3'-Dichlorobenzidine	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Benzo(a)anthracene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Chrysene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	bis(2-Ethylhexyl)phthalate	360.0000 U	76.0000 U	370.0000 U	81.0000 U	370.0000 U	380.0000 U
SVOA	Di-n-octylphthalate	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Benzo(b)fluoranthene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Benzo(k)fluoranthene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Benzo(a)pyrene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Indeno(1,2,3-cd)pyrene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Dibenz(a,h)anthracene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U
SVOA	Benzo(g,h,i)perylene	360.0000 U	370.0000 U	370.0000 U	370.0000 U	370.0000 U	380.0000 U

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CT808	SAMPLE ID ----->	036-K-0031-01MS	036-X-0031-01MSD	036-S-0031-01RE	036-S-0032-01	036-S-0033-01	036-S-0033-01RE
	ORIGINAL ID ----->	36S3101MS	36S3101MSD	36S3101RE	36S3201	36S3301	36S3301RE
	LAB SAMPLE ID ---->	40748-21MS	40748-21MSD	40748-21RE	40748-22	40748-14	40748-14RE
	LAB REC DATE ----->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
	UNITS ----->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Method	Parameter						
SVOA	Phenol	1600.0000	2000.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	bis(2-chloroethyl)ether	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2-Chlorophenol	1800.0000	2200.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	1,3-Dichlorobenzene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	1,4-Dichlorobenzene	830.0000	940.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	1,2-Dichlorobenzene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2-Methylphenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	bis(2-chloroisopropyl)ether	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Methylphenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	N-Nitroso-di-n-propylamine	930.0000	1100.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Hexachloroethane	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Nitrobenzene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Isophorone	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2-Nitrophenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,4-Dimethylphenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	bis(2-Chloroethoxy)methane	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,4-Dichlorophenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	1,2,4-Trichlorobenzene	890.0000	1100.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Naphthalene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Chloroaniline	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Hexachlorobutadiene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Chloro-3-methylphenol	2000.0000	2300.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2-Methylnaphthalene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Hexachlorocyclopentadiene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,4,6-Trichlorophenol	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,4,5-Trichlorophenol	940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	2-Chloronaphthalene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2-Nitroaniline	940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	Dimethylphthalate	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Acenaphthylene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,6-Dinitrotoluene	390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	3-Nitroaniline	940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	Acenaphthene	1300.0000	1500.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U

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CT808		SAMPLE ID ----->	036-K-0031-01MS	036-X-0031-01MSD	036-S-0031-01RE	036-S-0032-01	036-S-0033-01	036-S-0033-01RE
Method	Parameter							
SVOA	2,4-Dinitrophenol		940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	4-Nitrophenol		2300.0000	2700.0000	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	Dibenzofuran		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	2,4-Dinitrotoluene		1100.0000	1300.0000	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Diethylphthalate		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Chlorophenyl-phenylether		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Fluorene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Nitroaniline		940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	4,6-Dinitro-2-methylphenol		940.0000 U	940.0000 U	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	N-Nitrosodiphenylamine		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	4-Bromophenyl-phenylether		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Hexachlorobenzene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Pentachlorophenol		1400.0000	1700.0000	930.0000 U	950.0000 U	920.0000 U	920.0000 U
SVOA	Phanthrene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Anthracene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Carbazole		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Di-n-butylphthalate		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Fluoranthene		390.0000 U	390.0000 U	380.0000 U	170.0000 J	380.0000 U	380.0000 U
SVOA	Pyrene		2000.0000	2400.0000	380.0000 U	190.0000 J	380.0000 U	380.0000 U
SVOA	Butylbenzylphthalate		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	3,3'-Dichlorobenzidine		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Benzo(a)anthracene		390.0000 U	390.0000 U	380.0000 U	100.0000 J	380.0000 U	380.0000 U
SVOA	Chrysene		390.0000 U	390.0000 U	380.0000 U	120.0000 J	380.0000 U	380.0000 U
SVOA	bis(2-Ethylhexyl)phthalate		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Di-n-octylphthalate		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Benzo(b)fluoranthene		390.0000 U	390.0000 U	380.0000 U	130.0000 J	380.0000 U	380.0000 U
SVOA	Benzo(k)fluoranthene		390.0000 U	390.0000 U	380.0000 U	170.0000 J	380.0000 U	380.0000 U
SVOA	Benzo(a)pyrene		390.0000 U	390.0000 U	380.0000 U	120.0000 J	380.0000 U	380.0000 U
SVOA	Indeno(1,2,3-cd)pyrene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Dibenz(a,h)anthracene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U
SVOA	Benzo(g,h,i)perylene		390.0000 U	390.0000 U	380.0000 U	390.0000 U	380.0000 U	380.0000 U

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CT808	SAMPLE ID ----->	036-S-0033-03	036-S-0033-03RE	036-S-0034-01	036-S-0034-01RE	036-S-0035-01	036-S-0035-03
	ORIGINAL ID ----->	36S3303	36S3303RE	36S3401	36S3401RE	36S3501	36S3503
	LAB SAMPLE ID ---->	40748-15	40748-15RE	40748-16	40748-16RE	40748-17	40748-18
	LAB REC DATE ----->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
	UNITS ----->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Method	Parameter						
SVOA	Phenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	bis(2-chloroethyl)ether	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2-Chlorophenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	1,3-Dichlorobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	1,4-Dichlorobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	1,2-Dichlorobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2-Methylphenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	bis(2-chloroisopropyl)ether	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	4-Methylphenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	N-Nitroso-di-n-propylamine	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Hexachloroethane	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Nitrobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Isophorone	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2-Nitrophenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2,4-Dimethylphenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	bis(2-Chloroethoxy)methane	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2,4-Dichlorophenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	1,2,4-Trichlorobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Naphthalene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	4-Chloroaniline	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Hexachlorobutadiene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	4-Chloro-3-methylphenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2-Methylnaphthalene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Hexachlorocyclopentadiene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2,4,6-Trichlorophenol	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2,4,5-Trichlorophenol	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U
SVOA	2-Chloronaphthalene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2-Nitroaniline	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U
SVOA	Dimethylphthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	Acenaphthylene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	2,6-Dinitrotoluene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U
SVOA	3-Nitroaniline	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U
SVOA	Acenaphthene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U

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CT808		SAMPLE ID ----->	036-S-0033-03	036-S-0033-03RE	036-S-0034-01	036-S-0034-01RE	036-S-0035-01	036-S-0035-03
		ORIGINAL ID ----->	36S3303	36S3303RE	36S3401	36S3401RE	36S3501	36S3503
		LAB SAMPLE ID ---->	40748-15	40748-15RE	40748-16	40748-16RE	40748-17	40748-18
		LAB REC DATE ----->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
		UNITS ----->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Method	Parameter							
SVOA	2,4-Dinitrophenol	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U	900.0000 U
SVOA	4-Nitrophenol	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U	900.0000 U
SVOA	Dibenzofuran	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	2,4-Dinitrotoluene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Diethylphthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	4-Chlorophenyl-phenylether	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Fluorene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	4-Nitroaniline	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U	900.0000 U
SVOA	4,6-Dinitro-2-methylphenol	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U	900.0000 U
SVOA	N-Nitrosodiphenylamine	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	4-Bromophenyl-phenylether	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Hexachlorobenzene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Pentachlorophenol	930.0000 U	930.0000 U	970.0000 U	970.0000 U	970.0000 U	900.0000 U	900.0000 U
SVOA	Phenanthrene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Anthracene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Carbazole	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Di-n-butylphthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Fluoranthene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Pyrene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Butylbenzylphthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	3,3'-Dichlorobenzidine	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(a)anthracene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Chrysene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	bis(2-Ethylhexyl)phthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Di-n-octylphthalate	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(b)fluoranthene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(k)fluoranthene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(a)pyrene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Indeno(1,2,3-cd)pyrene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Dibenz(a,h)anthracene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U
SVOA	Benzo(g,h,i)perylene	380.0000 U	380.0000 U	400.0000 U	400.0000 U	400.0000 U	370.0000 U	370.0000 U

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CT808	SAMPLE ID ----->	036-S-0035-03RE	036-G-GE10-00	036-G-G110-00	SBL-T-T808-01	SBL-T-T808-02	
	ORIGINAL ID ----->	36S3503RE	36GE10	36G110	SBLKFV	SBLKHC	
	LAB SAMPLE ID ---->	40748-18RE	40733-19	40733-20	B-A2007A	B-A200B	
	LAB REC DATE ---->	06/30/94	06/29/94	06/29/94	/ /	/ /	
	UNITS ----->	UG/KG	UG/L	UG/L	UG/KG	UG/L	
Method	Parameter						
SVOA	Phenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	bis(2-chloroethyl)ether	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2-Chlorophenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	1,3-Dichlorobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	1,4-Dichlorobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	1,2-Dichlorobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2-Methylphenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	bis(2-chloroisopropyl)ether	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Methylphenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	N-Nitroso-di-n-propylamine	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Hexachloroethane	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Nitrobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Isophorone	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2-Nitrophenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,4-Dimethylphenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	bis(2-Chloroethoxy)methane	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,4-Dichlorophenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	1,2,4-Trichlorobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Naphthalene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Chloroaniline	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Hexachlorobutadiene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Chloro-3-methylphenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2-Methylnaphthalene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Hexachlorocyclopentadiene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,4,6-Trichlorophenol	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,4,5-Trichlorophenol	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	2-Chloronaphthalene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2-Nitroaniline	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	Dimethylphthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Acenaphthylene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,6-Dinitrotoluene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	3-Nitroaniline	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	Acenaphthene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	

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CTB08		SAMPLE ID -----> 036-S-0035-03RE	036-G-GE10-00	036-G-GI10-00	SBL-T-T808-01	SBL-T-T808-02	
Method	Parameter						
SVOA	2,4-Dinitrophenol	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	4-Nitrophenol	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	Dibenzofuran	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	2,4-Dinitrotoluene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Diethylphthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Chlorophenyl-phenylether	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Fluorene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Nitroaniline	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	4,6-Dinitro-2-methylphenol	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	N-Nitrosodiphenylamine	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	4-Bromophenyl-phenylether	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Hexachlorobenzene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Pentachlorophenol	900.0000 U	26.0000 U	27.0000 U	800.0000 U	25.0000 U	
SVOA	Phenanthrene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Anthracene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Carbazole	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Di-n-butylphthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Fluoranthene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Pyrene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Butylbenzylphthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	3,3'-Dichlorobenzidine	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Benzo(a)anthracene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Chrysene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	bis(2-Ethylhexyl)phthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Di-n-octylphthalate	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Benzo(b)fluoranthene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Benzo(k)fluoranthene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Benzo(a)pyrene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Indeno(1,2,3-cd)pyrene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Dibenz(a,h)anthracene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	
SVOA	Benzo(g,h,i)perylene	370.0000 U	11.0000 U	11.0000 U	330.0000 U	10.0000 U	

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CT808		SAMPLE ID ----->	036-S-0025-01	036-S-0025-03	036-S-0026-01	036-S-0026-03	036-S-0027-01	036-S-0028-01
Method	Parameter							
VOA	Chloromethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Bromomethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Vinyl Chloride		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Chloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Methylene Chloride		15.0000 U	16.0000 U	17.0000 U	16.0000 U	21.0000 U	67.0000 U
VOA	Acetone		20.0000 U	51.0000 U	38.0000 U	27.0000 U	65.0000 U	260.0000 U
VOA	Carbon Disulfide		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,1-Dichloroethene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,1-Dichloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,2-Dichloroethene (total)		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Chloroform		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,2-Dichloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	2-Butanone (MEK)		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,1,1-Trichloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Carbon Tetrachloride		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Bromodichloromethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,2-Dichloropropane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	cis-1,3-Dichloropropene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Trichloroethene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Dibromochloromethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,1,2-Trichloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Benzene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	trans-1,3-Dichloropropene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Bromoform		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	4-Methyl-2-Pentanone		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	2-Hexanone		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Tetrachloroethene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	1,1,2,2-Tetrachloroethane		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Toluene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Chlorobenzene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Ethylbenzene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Styrene		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U
VOA	Xylene (total)		11.0000 U	11.0000 U	11.0000 U	10.0000 U	11.0000 U	50.0000 U

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Method	Parameter	VOA	Chloromethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U
		VOA	Bromomethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U
VOA	Vinyl Chloride	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U	
VOA	Chloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U	
VOA	Methylene Chloride	15.0000 U	96.0000 U	15.0000 U	15.0000 U	15.0000 U	16.0000 U	17.0000 U	
VOA	Acetone	84.0000 U	90.0000 U	14.0000 U	75.0000 U	93.0000 U	20.0000 U		
VOA	Carbon Disulfide	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,1-Dichloroethene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,1-Dichloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,2-Dichloroethene (total)	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Chloroform	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,2-Dichloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	2-Butanone (MEK)	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,1,1-Trichloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Carbon Tetrachloride	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Bromodichloromethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,2-Dichloropropane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	cis-1,3-Dichloropropene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Trichloroethene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Dibromochloromethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	1,1,2-Trichloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Benzene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	trans-1,3-Dichloropropene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Bromoform	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	4-Methyl-2-Pentanone	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	2-Hexanone	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Tetrachloroethene	11.0000 U	1100.0000	10.0000 J	11.0000 U	11.0000 U	12.0000 U		
VOA	1,1,2,2-Tetrachloroethane	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Toluene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Chlorobenzene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Ethylbenzene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Styrene	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		
VOA	Xylene (total)	11.0000 U	56.0000 U	11.0000 U	11.0000 U	11.0000 U	12.0000 U		

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CT808	SAMPLE ID ----->	036-K-0031-01MS	036-X-0031-01MSD	036-S-0032-01	036-S-0033-01	036-S-0033-03	036-S-0034-01
	ORIGINAL ID ----->	36S3101MS	36S3101MSD	36S3201	36S3301	36S3303	36S3401
LAB SAMPLE ID ----->	40748-8MS	40748-8MSD	40748-9	40748-1	40748-2	40748-3	
LAB REC DATE ----->	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94	06/30/94
UNITS ----->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Method	Parameter						
VOA	Chloromethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Bromomethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Vinyl Chloride	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Chloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Methylene Chloride	19.0000 U	17.0000 U	18.0000 U	28.0000 U	31.0000 U	32.0000 U
VOA	Acetone	42.0000 U	21.0000 U	37.0000 U	35.0000 U	37.0000 U	83.0000 U
VOA	Carbon Disulfide	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,1-Dichloroethene	62.0000	65.0000	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,1-Dichloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,2-Dichloroethene (total)	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Chloroform	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,2-Dichloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	2-Butanone (MEK)	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,1,1-Trichloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Carbon Tetrachloride	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Bromodichloromethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,2-Dichloropropane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	cis-1,3-Dichloropropene	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Trichloroethene	61.0000	66.0000	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Dibromochloromethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,1,2-Trichloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Benzene	62.0000	65.0000	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	trans-1,3-Dichloropropene	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Bromoform	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	4-Methyl-2-Pentanone	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	2-Hexanone	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Tetrachloroethene	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	1,1,2,2-Tetrachloroethane	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Toluene	63.0000	64.0000	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Chlorobenzene	61.0000	66.0000	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Ethylbenzene	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Styrene	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U
VOA	Xylene (total)	12.0000 U	12.0000 U	12.0000 U	11.0000 U	12.0000 U	12.0000 U

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CT808	SAMPLE ID ----->	036-S-0035-01	ORIGINAL ID ----->	36S3501	036-S-0035-03	036-G-GE10-00	036-G-GI10-00	036-G-GT20-00	036-T-GT21-00	
Method	Parameter									
VOA	Chloromethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Bromomethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Vinyl Chloride	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Chloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Methylene Chloride	29.0000 U		15.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Acetone	50.0000 U		120.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Carbon Disulfide	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,1-Dichloroethene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,1-Dichloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,2-Dichloroethene (total)	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Chloroform	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,2-Dichloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	2-Butanone (MEK)	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,1,1-Trichloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Carbon Tetrachloride	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Bromodichloromethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,2-Dichloropropane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	cis-1,3-Dichloropropene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Trichloroethene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Dibromochloromethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,1,2-Trichloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Benzene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	trans-1,3-Dichloropropene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Bromoform	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	4-Methyl-2-Pentanone	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	2-Hexanone	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Tetrachloroethene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	1,1,2,2-Tetrachloroethane	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Toluene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Chlorobenzene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Ethylbenzene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Styrene	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U
VOA	Xylene (total)	12.0000 U		11.0000 U		10.0000 U		10.0000 U		10.0000 U

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CT808		SAMPLE ID -----> ORIGINAL ID -----> LAB SAMPLE ID ----> LAB REC DATE -----> UNITS ----->	VBL-T-T808-01 VBLKDB BD070594A / / UG/KG	VBL-T-T808-02 VBLKDE BD070794A / / UG/KG	VBL-T-T808-03 VBLKDF BD070894A / / UG/KG	VBL-T-T808-04 VBLKEP BE070794A / / UG/L		
Method	Parameter							
VOA	Chloromethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Bromomethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Vinyl Chloride	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Chloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Methylene Chloride	13.0000 J	12.0000 J	3.0000 J	5.0000 J			
VOA	Acetone	10.0000 J	23.0000 J	12.0000 J	10.0000 U			
VOA	Carbon Disulfide	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,1-Dichloroethene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,1-Dichloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,2-Dichloroethene (total)	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Chloroform	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,2-Dichloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	2-Butanone (MEK)	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,1,1-Trichloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Carbon Tetrachloride	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Bromodichloromethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,2-Dichloropropane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	cis-1,3-Dichloropropene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Trichloroethene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Dibromochloromethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,1,2-Trichloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Benzene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	trans-1,3-Dichloropropene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Bromoform	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	4-Methyl-2-Pentanone	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	2-Hexanone	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Tetrachloroethene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	1,1,2,2-Tetrachloroethane	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Toluene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Chlorobenzene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Ethylbenzene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Styrene	10.0000 U	10.0000 U	10.0000 U	10.0000 U			
VOA	Xylene (total)	10.0000 U	10.0000 U	10.0000 U	10.0000 U			

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CT809	SAMPLE ID ----->	036-S-0036-01	036-S-0036-03	036-E-SE11-00	036-W-SI11-00		
	ORIGINAL ID ----->	36S3601	36S3603	36SE11	36S111		
	LAB SAMPLE ID ---->	40931-015	40931-016	40931-007	40931-006		
	LAB REC DATE ---->	07/20/94	07/20/94	07/20/94	07/20/94		
	UNITS ----->	MG/KG	MG/KG	UG/L	UG/L		
Method	Parameter						
CYANIDE	Cyanide	0.07 U	0.07 U	0.75 U	0.75 U		

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CT809		SAMPLE ID -----> ORIGINAL ID -----> LAB SAMPLE ID ---> LAB REC DATE ----> UNITS ----->	036-S-0036-01 36S3601 40931-015 07/20/94 MG/KG	036-S-0036-03 36S3603 40931-016 07/20/94 MG/KG	036-E-SE11-00 36SE11 40931-007 07/20/94 UG/L	036-W-SI11-00 36SI11 40931-006 07/20/94 UG/L		
Method	Parameter							
METAL	Aluminum	2370.	1510.	47.7	J	15.1	U	
METAL	Antimony	2.7	U	2.6	U	13.1	U	13.1
METAL	Arsenic	0.44	U	0.49	J	2.1	U	2.1
METAL	Barium	2.2	U	4.	U	0.9	U	0.9
METAL	Beryllium	0.06	U	0.06	U	0.3	U	0.3
METAL	Cadmium	0.34	U	0.31	U	1.6	U	1.6
METAL	Calcium	2030.	1650.	1470.	J	249.		
METAL	Chromium	1.7	U	1.4	U	2.4	U	2.4
METAL	Cobalt	1.	J	1.5	J	2.8	U	2.8
METAL	Copper	1.1	J	2.	J	2.6	U	2.6
METAL	Iron	2490.	2160.	9.4	U	9.4	U	
METAL	Lead	12.1		31.2		0.9	U	0.9
METAL	Magnesium	49.9	U	170.	U	67.	J	24.2
METAL	Manganese	38.6		16.6		1.6	J	0.6
METAL	Mercury	0.04	U	0.15		0.1	U	0.1
METAL	Nickel	1.4	U	1.3	U	6.9	U	6.9
METAL	Potassium	158.		96.2	U	493.	U	493.
METAL	Selenium	0.65	U	0.6	U	3.1	U	3.1
METAL	Silver	0.57	U	0.53	U	2.7	U	2.7
METAL	Sodium	22.1	U	18.4	U	136.	J	42.2
METAL	Thallium	0.65	U	0.6	U	3.1	U	3.1
METAL	Vanadium	4.7		4.4		3.5	U	3.5
METAL	Zinc	5.1	U	11.1	U	9.	J	3.8

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CT809	SAMPLE ID ----->	036-S-0036-01	036-S-0036-03	036-E-LCSY-16MS	036-E-SE11-00	036-W-SI11-00	PBL-T-T809-01
	ORIGINAL ID ----->	36S3601	36S3603	LCSY16MS	36SE11	36SI11	PBLK42
	LAB SAMPLE ID ---->	40931-13	40931-14	LSP3996	40931-5	40931-4	BP3995C
	LAB REC DATE ---->	07/20/94	07/20/94	07/20/94	07/20/94	07/20/94	/ /
	UNITS ----->	UG/KG	UG/KG	UG/KG	UG/L	UG/L	UG/L
Method	Parameter						
PEST	alpha-BHC	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	beta-BHC	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	delta-BHC	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	gamma-BHC (Lindane)	1.8 U	1.8 U	12.	0.054 U	0.052 U	0.05 U
PEST	Heptachlor	1.8 U	1.8 U	12.	0.054 U	0.052 U	0.05 U
PEST	Aldrin	1.8 U	1.8 U	12.	0.054 U	0.052 U	0.05 U
PEST	Heptachlor epoxide	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	Endosulfan I	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	Dieldrin	3.5 U	3.5 U	26.	0.11 U	0.1 U	0.1 U
PEST	4,4'-DDE	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	Endrin	3.5 U	3.5 U	27.	0.11 U	0.1 U	0.1 U
PEST	Endosulfan II	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	4,4'-DDD	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	Endosulfan sulfate	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	4,4'-DDT	3.5 U	3.5 U	28.	0.11 U	0.1 U	0.1 U
PEST	Methoxychlor	18. U	18. U	17. U	0.54 U	0.52 U	0.5 U
PEST	Endrin ketone	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	Endrin aldehyde	3.5 U	3.5 U	3.3 U	0.11 U	0.1 U	0.1 U
PEST	alpha-Chlordane	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	gamma-Chlordane	1.8 U	1.8 U	1.7 U	0.054 U	0.052 U	0.05 U
PEST	Toxaphene	180. U	180. U	170. U	5.4 U	5.2 U	5. U
PEST	Aroclor 1016	35. U	35. U	33. U	1.1 U	1. U	1. U
PEST	Aroclor 1221	71. U	71. U	67. U	2.1 U	2.1 U	2. U
PEST	Aroclor 1232	35. U	35. U	33. U	1.1 U	1. U	1. U
PEST	Aroclor 1242	35. U	35. U	33. U	1.1 U	1. U	1. U
PEST	Aroclor 1248	35. U	35. U	33. U	1.1 U	1. U	1. U
PEST	Aroclor 1254	35. U	35. U	78. U	1.1 U	1. U	1. U
PEST	Aroclor 1260	35. U	35. U	33. U	1.1 U	1. U	1. U

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CT809		SAMPLE ID ----->	PBL-T-T809-02	PIB-T-T809-03	PIB-T-T809-04	PIB-T-T809-05	PIB-T-T809-06	PIB-T-T809-07
		ORIGINAL ID ----->	PBLK43	PIBLKD1	PIBLKD2	PIBLKD3	PIBLKY1	PIBLKY2
		LAB SAMPLE ID ----->	BP3996A	PIBLKD1	PIBLKD2	PIBLKD3	PIBLKY1	PIBLKY2
		LAB REC DATE ----->	/ /	/ /	/ /	/ /	/ /	/ /
		UNITS ----->	UG/KG	UG/L	UG/L	UG/L	UG/L	UG/L
Method	Parameter							
PEST	alpha-BHC		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	beta-BHC		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	delta-BHC		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	gamma-BHC (Lindane)		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Heptachlor		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Aldrin		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Heptachlor epoxide		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Endosulfan I		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Dieldrin		3.3 U	0.1 U				
PEST	4,4'-DDE		3.3 U	0.1 U				
PEST	Endrin		3.3 U	0.1 U				
PEST	Endosulfan II		3.3 U	0.1 U				
PEST	4,4'-DDD		3.3 U	0.1 U				
PEST	Endosulfan sulfate		3.3 U	0.1 U				
PEST	4,4'-DDT		3.3 U	0.1 U				
PEST	Methoxychlor		17. U	0.5 U				
PEST	Endrin ketone		3.3 U	0.1 U				
PEST	Endrin aldehyde		3.3 U	0.1 U				
PEST	alpha-Chlordane		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	gamma-Chlordane		1.7 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PEST	Toxaphene		170. U	5. U	5. U	5. U	5. U	5. U
PEST	Aroclor 1016		33. U	1. U	1. U	1. U	1. U	1. U
PEST	Aroclor 1221		67. U	2. U	2. U	2. U	2. U	2. U
PEST	Aroclor 1232		33. U	1. U	1. U	1. U	1. U	1. U
PEST	Aroclor 1242		33. U	1. U	1. U	1. U	1. U	1. U
PEST	Aroclor 1248		33. U	1. U	1. U	1. U	1. U	1. U
PEST	Aroclor 1254		33. U	1. U	1. U	1. U	1. U	1. U
PEST	Aroclor 1260		33. U	1. U	1. U	1. U	1. U	1. U

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CT809	SAMPLE ID ----->	PIB-T-T809-08	PIB-T-T809-09				
	ORIGINAL ID ----->	PIBLKYD	PIBLKYE				
	LAB SAMPLE ID --->	PIBLKYD	PIBLKYE				
	LAB REC DATE ---->	/ /	/ /				
	UNITS ----->	UG/L	UG/L				
Method	Parameter						
PEST	alpha-BHC	0.05	U	0.05	U		
PEST	beta-BHC	0.05	U	0.05	U		
PEST	delta-BHC	0.05	U	0.05	U		
PEST	gamma-BHC (Lindane)	0.05	U	0.05	U		
PEST	Heptachlor	0.05	U	0.05	U		
PEST	Aldrin	0.05	U	0.05	U		
PEST	Heptachlor epoxide	0.05	U	0.05	U		
PEST	Endosulfan I	0.05	U	0.05	U		
PEST	Dieldrin	0.1	U	0.1	U		
PEST	4,4'-DDE	0.1	U	0.1	U		
PEST	Endrin	0.1	U	0.1	U		
PEST	Endosulfan II	0.1	U	0.1	U		
PEST	4,4'-DDD	0.1	U	0.1	U		
PEST	Endosulfan sulfate	0.1	U	0.1	U		
PEST	4,4'-DDT	0.1	U	0.1	U		
PEST	Methoxychlor	0.5	U	0.5	U		
PEST	Endrin ketone	0.1	U	0.1	U		
PEST	Endrin aldehyde	0.1	U	0.1	U		
PEST	alpha-Chlordane	0.05	U	0.05	U		
PEST	gamma-Chlordane	0.05	U	0.05	U		
PEST	Toxaphene	5.	U	5.	U		
PEST	Aroclor 1016	1.	U	1.	U		
PEST	Aroclor 1221	2.	U	2.	U		
PEST	Aroclor 1232	1.	U	1.	U		
PEST	Aroclor 1242	1.	U	1.	U		
PEST	Aroclor 1248	1.	U	1.	U		
PEST	Aroclor 1254	1.	U	1.	U		
PEST	Aroclor 1260	1.	U	1.	U		

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CT809		SAMPLE ID ----->	036-S-0036-01	036-S-0036-03	036-E-SE11-00	036-W-SI11-00	SBL-T-T809-01	SBL-T-T809-02					
Method	Parameter												
SVOA	Phenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	bis(2-chloroethyl)ether	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2-Chlorophenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	1,3-Dichlorobenzene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	1,4-Dichlorobenzene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	1,2-Dichlorobenzene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2-Methylphenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	bis(2-chloroisopropyl)ether	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	4-Methylphenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	N-Nitroso-di-n-propylamine	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Hexachloroethane	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Nitrobenzene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Isophorone	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2-Nitrophenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2,4-Dimethylphenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	bis(2-Chloroethoxy)methane	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2,4-Dichlorophenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	1,2,4-Trichlorobenzene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Naphthalene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	4-Chloroaniline	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Hexachlorobutadiene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	4-Chloro-3-methylphenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2-Methylnaphthalene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	Hexachlorocyclopentadiene	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2,4,6-Trichlorophenol	350.	U	360.	U	11.	U	330.	U	10.	U		
SVOA	2,4,5-Trichlorophenol	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	2-Chloronaphthalene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	2-Nitroaniline	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	Dimethylphthalate	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Acenaphthylene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	2,6-Dinitrotoluene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	3-Nitroaniline	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	Acenaphthene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U

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CT809		SAMPLE ID ----->	036-S-0036-01	036-S-0036-03	036-E-SE11-00	036-W-SI11-00	SBL-T-T809-01	SBL-T-T809-02					
		ORIGINAL ID ----->	36S3601	36S3603	36SE11	36SI11	SBLKHS	SBLKHT					
		LAB SAMPLE ID ---->	40931-13	40931-14	40931-5	40931-4	B-A2020A	B-A2019C					
		LAB REC DATE ---->	07/20/94	07/20/94	07/20/94	07/20/94	/ /	/ /					
		UNITS ----->	UG/KG	UG/KG	UG/L	UG/L	UG/KG	UG/L					
Method	Parameter												
SVOA	2,4-Dinitrophenol	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	4-Nitrophenol	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	Dibenzofuran	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	2,4-Dinitrotoluene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Diethylphthalate	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	4-Chlorophenyl-phenylether	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Fluorene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	4-Nitroaniline	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	4,6-Dinitro-2-methylphenol	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	N-Nitrosodiphenylamine	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	4-Bromophenyl-phenylether	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Hexachlorobenzene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Pentachlorophenol	850.	U	870.	U	28.	U	27.	U	800.	U	25.	U
SVOA	Phenanthrene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Anthracene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Carbazole	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Di-n-butylphthalate	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Fluoranthene	54.	J	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Pyrene	45.	J	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Butylbenzylphthalate	110.	U	38.	U	11.	U	11.	U	330.	U	10.	U
SVOA	3,3'-Dichlorobenzidine	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Benzo(a)anthracene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Chrysene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	bis(2-Ethylhexy)phthalate	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Di-n-octylphthalate	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Benzo(b)fluoranthene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Benzo(k)fluoranthene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Benzo(a)pyrene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Indeno(1,2,3-cd)pyrene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Dibenz(a,h)anthracene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U
SVOA	Benzo(g,h,i)perylene	350.	U	360.	U	11.	U	11.	U	330.	U	10.	U

DATA1CP2
08/17/94PENSACOLA, SITE 36
SAMPLESPage: 8
Time: 10:30

CT809	SAMPLE ID ----->	036-S-0036-01	036-S-0036-03	036-E-SE11-00	036-W-S111-00	036-T-ST22-00	036-T-ST23-00
	ORIGINAL ID ----->	36S3601	36S3603	36SE11	36S111	36ST22	36ST23
	LAB SAMPLE ID --->	40931-10	40931-11	40931-2	40931-1	40931-3	40931-12
	LAB REC DATE ---->	07/20/94	07/20/94	07/20/94	07/20/94	07/20/94	07/20/94
	UNITS ----->	UG/KG	UG/KG	UG/L	UG/L	UG/L	UG/L
Method	Parameter						
VOA	Chloromethane	12.	U	10.	U	10.	U
VOA	Bromomethane	12.	U	10.	U	10.	U
VOA	Vinyl Chloride	12.	U	10.	U	10.	U
VOA	Chloroethane	12.	U	10.	U	10.	U
VOA	Methylene Chloride	8.	U	7.	J	6.	J
VOA	Acetone	18.	U	15.	U	10.	U
VOA	Carbon Disulfide	12.	U	10.	U	10.	U
VOA	1,1-Dichloroethene	12.	U	10.	U	10.	U
VOA	1,1-Dichloroethane	12.	U	10.	U	10.	U
VOA	1,2-Dichloroethene (total)	12.	U	10.	U	10.	U
VOA	Chloroform	12.	U	10.	U	10.	U
VOA	1,2-Dichloroethane	12.	U	10.	U	10.	U
VOA	2-Butanone (MEK)	12.	U	10.	U	10.	U
VOA	1,1,1-Trichloroethane	12.	U	10.	U	10.	U
VOA	Carbon Tetrachloride	12.	U	10.	U	10.	U
VOA	Bromodichloromethane	12.	U	10.	U	10.	U
VOA	1,2-Dichloropropane	12.	U	10.	U	10.	U
VOA	cis-1,3-Dichloropropene	12.	U	10.	U	10.	U
VOA	Trichloroethene	12.	U	10.	U	10.	U
VOA	Dibromochloromethane	12.	U	10.	U	10.	U
VOA	1,1,2-Trichloroethane	12.	U	10.	U	10.	U
VOA	Benzene	12.	U	10.	U	10.	U
VOA	trans-1,3-Dichloropropene	12.	U	10.	U	10.	U
VOA	Bromoform	12.	U	10.	U	10.	U
VOA	4-Methyl-2-Pentanone	12.	U	10.	U	10.	U
VOA	2-Hexanone	12.	U	10.	U	10.	U
VOA	Tetrachloroethene	12.	U	10.	U	10.	U
VOA	1,1,2,2-Tetrachloroethane	12.	U	10.	U	10.	U
VOA	Toluene	12.	U	10.	U	10.	U
VOA	Chlorobenzene	12.	U	10.	U	10.	U
VOA	Ethylbenzene	12.	U	10.	U	10.	U
VOA	Styrene	12.	U	10.	U	10.	U
VOA	Xylene (total)	12.	U	10.	U	10.	U

DATA1CP2
08/17/94PENSACOLA, SITE 36
SAMPLESPage: 9
Time: 10:30

CT809		SAMPLE ID -----> ORIGINAL ID -----> LAB SAMPLE ID -----> LAB REC DATE -----> UNITS ----->	VBL-T-1809-01 VBLKCE BC072794A / / UG/L	VBL-T-T809-02 VBLKCH BC072994A / / UG/KG				
Method	Parameter							
VOA	Chloromethane	10.	U	10.	U			
VOA	Bromomethane	10.	U	10.	U			
VOA	Vinyl Chloride	10.	U	10.	U			
VOA	Chloroethane	10.	U	10.	U			
VOA	Methylene Chloride	9.	J	6.	J			
VOA	Acetone	10.	U	11.	J			
VOA	Carbon Disulfide	10.	U	10.	U			
VOA	1,1-Dichloroethene	10.	U	10.	U			
VOA	1,1-Dichloroethane	10.	U	10.	U			
VOA	1,2-Dichloroethene (total)	10.	U	10.	U			
VOA	Chloroform	10.	U	10.	U			
VOA	1,2-Dichloroethane	10.	U	10.	U			
VOA	2-Butanone (MEK)	10.	U	10.	U			
VOA	1,1,1-Trichloroethane	10.	U	10.	U			
VOA	Carbon Tetrachloride	10.	U	10.	U			
VOA	Bromodichloromethane	10.	U	10.	U			
VOA	1,2-Dichloropropane	10.	U	10.	U			
VOA	cis-1,3-Dichloropropene	10.	U	10.	U			
VOA	Trichloroethene	10.	U	10.	U			
VOA	Dibromochloromethane	10.	U	10.	U			
VOA	1,1,2-Trichloroethane	10.	U	10.	U			
VOA	Benzene	10.	U	10.	U			
VOA	trans-1,3-Dichloropropene	10.	U	10.	U			
VOA	Bromoform	10.	U	10.	U			
VOA	4-Methyl-2-Pentanone	10.	U	10.	U			
VOA	2-Hexanone	10.	U	10.	U			
VOA	Tetrachloroethene	10.	U	10.	U			
VOA	1,1,2,2-Tetrachloroethane	10.	U	10.	U			
VOA	Toluene	10.	U	10.	U			
VOA	Chlorobenzene	10.	U	10.	U			
VOA	Ethylbenzene	10.	U	10.	U			
VOA	Styrene	10.	U	10.	U			
VOA	Xylene (total)	10.	U	10.	U			

Appendix D
NAS Pensacola Reference Concentrations

Comprehensive Long-Term Environmental Action Navy

Summary Analytical Results of Background Soil Samples				
Sample Identification Number				
Parameter	Minimum Detected Concentration	Maximum Detected Concentration	Average Background Concentration	2 X Average Background Concentration
Inorganics (mg/kg)				
Aluminum	95.20	12400.00	1916.68	3833.36
Antimony	4.65	4.80	4.74	9.49
Arsenic	1.70	2.40	0.78	1.56
Barium	1.20	10.10	2.32	4.63
Beryllium	BDL	BDL	0.21	0.41
Cadmium	BDL	BDL	0.50	1.00
Calcium	35.70	6740.00	456.18	912.37
Chromium	2.40	11.80	3.07	6.13
Cobalt	BDL	BDL	0.93	1.87
Copper	5.10	5.10	2.87	5.74
Cyanide	BDL	BDL	0.26	0.52
Iron	205.00	9180.00	1372.50	2745.00
Lead	0.44	28.00	3.66	7.32
Magnesium	365.00	365.00	66.67	133.33
Manganese	1.70	63.70	10.68	21.36
Mercury	BDL	BDL	0.05	0.10
Nickel	BDL	BDL	3.19	6.38
Potassium	BDL	BDL	230.33	460.67
Selenium	BDL	BDL	0.31	0.62
Silver	BDL	BDL	1.03	2.07
Sodium	97.20	97.20	53.93	107.85
Thallium	BDL	BDL	0.41	0.82
Vanadium	1.60	20.60	2.91	5.83
Zinc	3.30	29.00	8.43	16.87

Note:

1. Minimum and Maximum detected concentrations are values positively detected within the sample group.
2. BDL (below detection limits): the compound was not positively identified within the concentration limits.
3. The average was based on all positively reported concentrations, half the quantitation concentrations, the approximated detected concentration, and the approximated quantitation concentration for all sampling intervals.

Comprehensive Long-Term Environmental Action Navy

Summary Analytical Results of Background Soil Samples

Parameter	Sample Identification Number										
	01SI6701	01SI6703	01SI6705	01SI6707	01SI6709	01SI6711	01SI6713	01SI6717	01SI6719	01SI6721	01SI6723
Inorganics (mg/kg)											
Aluminum	12400.00	1800.00	9050.00	1320.00	932.00	574.00	502.00	473.00	179.00	156.00	95.20
Antimony	4.65	4.70	4.65	4.80	4.80	4.75	4.80	-	-	4.80	4.80
Arsenic	2.40	0.61	1.70	0.62	0.62	0.62	0.62	0.70	0.62	0.62	0.62
Barium	5.80	1.60	10.10	1.80	1.80	1.20	0.50	0.50	0.50	0.50	0.50
Beryllium	0.20	0.21	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Cadmium	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Calcium	421.00	227.00	6740.00	113.00	78.70	67.00	50.60	47.70	16.25	35.70	36.50
Chromium	11.80	1.00	8.00	1.00	1.00	1.00	1.00	1.00	3.70	1.00	1.00
Cobalt	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Copper	5.10	2.60	5.10	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Cyanide	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Iron	9180.00	1450.00	4790.00	1140.00	866.00	525.00	482.00	483.00	449.00	237.00	225.00
Lead	20.10	1.30	28.00	1.20	0.27	0.21	0.44	1.10	0.60	0.21	0.21
Magnesium	48.15	48.70	365.00	49.60	49.60	49.40	49.45	48.95	49.60	48.95	49.35
Manganese	63.70	3.70	63.60	3.80	4.40	5.70	5.70	5.60	4.10	1.70	1.70
Mercury	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Nickel	3.15	3.15	3.10	3.25	3.25	3.20	3.20	3.20	3.25	3.20	3.20
Potassium	226.00	229.00	225.00	233.00	233.00	232.00	232.00	230.00	233.00	230.00	231.50
Selenium	0.31	0.31	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Silver	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Sodium	58.00	43.75	56.00	55.50	67.50	49.00	46.95	44.40	36.90	54.00	50.50
Thallium	0.41	0.41	0.41	0.42	0.42	0.41	0.42	0.41	0.42	0.41	0.42
Vanadium	20.60	2.60	12.50	2.00	1.60	0.75	0.75	0.70	0.75	0.70	0.75
Zinc	10.90	1.50	29.00	1.40	3.30	7.20	7.30	6.00	29.00	19.90	17.20

NOTE:

Bold: compounds were analyzed for, but was not detected above the reported sample quantitation limit (above reported values are equal to half the quantitation limit)

Italics: compound was positively detected, however, the reported concentration is considered to approximate the concentration within the sample.

Bold/Italics: compound was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

"-" : sample results rejected due to deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the compound cannot be verified.

Comprehensive Long-Term Environmental Action Navy

Parameter	Sample Identification Number						
	01SI6901	01SI6903	01SI6905	01SI6907	01SI6909	01SI6911	01SI6913
Inorganics (mg/kg)							
Aluminum	1240.00	1430.00	1550.00	991.00	820.00	293.00	695.00
Antimony	4.65	4.70	4.80	4.75	4.70	4.75	4.80
Arsenic	0.61	0.61	0.62	0.62	0.61	0.62	0.62
Barium	5.90	3.00	2.40	1.70	1.60	0.50	1.80
Beryllium	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Cadmium	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Calcium	162.00	71.40	50.80	16.15	15.95	16.15	45.40
Chromium	1.00	3.50	2.40	3.30	3.50	5.40	4.60
Cobalt	0.90	0.90	0.95	0.95	0.90	0.95	0.95
Copper	2.55	2.55	2.60	2.60	2.55	2.60	2.60
Cyanide	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Iron	911.00	1010.00	963.00	697.00	595.00	205.00	497.00
Lead	6.70	2.90	0.79	0.56	0.49	0.21	0.59
Magnesium	48.30	48.55	49.50	49.35	48.60	49.35	49.60
Manganese	3.70	3.70	3.70	4.60	3.70	3.40	5.70
Mercury	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Nickel	3.15	3.15	3.20	3.20	3.15	3.20	3.25
Potassium	226.50	228.00	232.50	231.50	228.50	231.50	233.00
Selenium	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Silver	1.00	1.00	1.05	1.05	1.00	1.05	1.05
Sodium	50.50	49.80	54.50	51.50	59.00	97.20	45.65
Thallium	0.41	0.41	0.42	0.42	0.41	0.42	0.42
Vanadium	2.50	1.70	1.60	0.75	0.70	0.75	0.75
Zinc	8.20	4.60	1.80	1.00	1.20	0.80	1.50

NOTE:

Bold: compounds were analyzed for, but was not detected above the reported sample quantitation limit (above reported values are equal to half the quantitation limit)

Italics: compound was positively detected, however, the reported concentration is considered to approximate the concentration within the sample.

Bold/Italics: compound was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

--: sample results rejected due to deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the compound cannot be verified.

Appendix E
Florida Administrative Code 17-775
Florida Thermal Treatment Facilities Regulations

FLORIDA SOIL THERMAL TREATMENT FACILITIES REGULATIONS

(Florida Administrative Code, Title 17—Department of Environmental Regulation,
Chapter 17-775—Soil Thermal Treatment Facilities; Adopted December 12, 1990;
Amended November 30, 1992)

PART I INTENT, DEFINITIONS AND GENERAL PROVISIONS

17-775.100 Intent.

(1) Rule 17-770, F.A.C., establishes petroleum or petroleum product contamination cleanup criteria and a cleanup process which must be undertaken at all petroleum contamination sites. As a result of this cleanup effort, petroleum contaminated soils may be removed for thermal treatment.

(2) The State of Florida Department Environmental Regulation promulgates this rule in order to provide assurances that contaminated soils as defined in Rule 17-770.200, F.A.C., which are removed for thermal treatment, are properly handled and treated to levels that will not endanger public health or cause future contamination of other soils, ground water, and surface water.

(3) The Department recognizes that thermal treatment of petroleum contaminated soils in asphalt plants, cement kilns, rotary kilns, or their equivalents, is a viable method of remediating soils.

(4) The Department intends for this rule to apply only to thermal treatment facilities and the petroleum contaminated soils which will be treated therein.

17-775.200 Definitions. All words and phrases defined in Section 376.301, F.S., shall have the same meaning when used in this Chapter unless the context clearly indicates otherwise. The following words and phrases when used in this Chapter shall, unless the context clearly indicates otherwise, have the following meanings:

(1) "Contamination" or "contaminated" means a discharge of petroleum or petroleum products into the surface waters, ground waters or upon the land, in quantities which may result in a violation of water quality standards set forth in Chapter 17-3 and 17-302, F.A.C.

(2) "Department" means the State of Florida Department of Environmental Regulation.

(3) "Environmental Protection Agency" or "EPA" means The United States Environmental Protection Agency.

(4) "Existing facility" shall mean a soil thermal treatment facility which is in operation prior to the effective date of this Chapter.

(5) "Hazardous substance" means any substance which is defined as a hazardous substance in the United States Comprehensive Environmental Response, Compensation and Liability Act of 1980, 94 Stat. 2767, as cited in Rule 17-150.200(2), F.A.C.

(6) "Hazardous waste" means a solid waste identified as a hazardous waste in 40 CFR 261.3.

(7) "Leachate" means liquid which percolates through or emerges from stockpiled soil and contains soluble, suspended or miscible materials.

(8) "Mobile facility" means a thermal treatment system which is transported to a soil contamination site and only treats soil from that specific site.

(9) "Petroleum contaminated soil" means soil which has become contaminated with one or more of the following liquid products made from petroleum: all forms of fuel known as

gasoline, diesel fuel, jet fuel, kerosene, grades 2 through 6 fuel oils, crude oil, bunker C oil, residual oils, and non-hazardous petroleum based lubricating, hydraulic, and mineral oils. This definition applies only to the regulation of soil thermal treatment facilities.

(10) "Stationary facility" means a thermal treatment system which thermally treats contaminated soil transported to the facility.

(11) "Thermal treatment" means to apply heat to increase soil temperatures sufficiently to volatilize or burn contaminants within the soil.

(12) "Soil thermal treatment facility" means either a stationary or mobile facility designed, constructed or utilized, and permitted by the Department to handle, store, and thermally treat or process petroleum contaminated soils. "Soil thermal treatment facility" does not include electrical power plants in which thermal treatment of contaminated soils from their own property results in ash which is disposed of in accordance with Chapters 17-701 or 17-702, F.A.C., or facilities that treat hazardous waste or hazardous substances.

(13) "Total Volatile Organic Aromatics" or "total VOA" means the sum of concentrations of benzene, toluene, total xylenes, and ethylbenzene as determined by EPA Method 602, 5030/8020, or 5030/8021.

(14) "Used oil" means any lubricant which has been refined from crude oil and, as a result of use, storage or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of properties, but which may be suitable for

further use as a fuel or may be economically recycled for use as a fuel. "Used oil" shall not include any oil which has been mixed with any material which is a hazardous waste, unless the material is a hazardous waste solely due to the characteristic of ignitability as defined in 40 CFR Part 261, Subpart C as of July 1, 1991. Used oil containing more than 1000 parts per million of total organic halides is presumed to be mixed with a halogenated hazardous waste listed in 40 CFR Part 261, Subpart D, unless a demonstration is made that the used oil does not contain a hazardous waste.

17-775.210 Reference Standards.

(1) Reference standards are available for inspection at the Department's district and central offices.

(2) Specific references to documents or parts thereof are adopted and incorporated as standards only to the extent that the documents are specifically referenced in this Chapter.

(a) DER Manual for Preparing Quality Assurance Plans (DER-QA-001/90), Florida Department of Environmental Regulation, Quality Assurance Section.

(b) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA SW 846, Third Edition, Document No. 955-001-00000-1, as amended by update Package I (December, 1990).

(c) EPA Draft Method 9073 for Total Recoverable Petroleum Hydrocarbons.

(d) Federal Register; Volume 55, No. 61, pages 11798 to 11877; dated Thursday, March 29, 1990; on Hazardous Waste Management System; Identification and Listing of Hazardous Waste, Toxicity Characteristics Revisions; Final Rule

(e) Quality Assurance Standard Operating Procedures Manual for Soil Thermal Treatment Facilities as of November, 1991.

(f) EPA Method 3665 for sulfuric acid/permanganate cleanup as written in Proposed Update II (November 1990) of (b) above.

17-775.300 General Permits.

(1) Soil thermal treatment facilities shall operate pursuant to a general permit, and shall meet the applicable general permit requirements in Rules 17-4.510 through 17-4.540, F.A.C., and the requirements of this Chapter.

(2) Prior to operating under a general permit, the owners of a soil thermal treatment facility shall notify the Department on Form 17-775.900(1). For a new soil thermal treatment facility, renewal of a general permit, or modification of a general permit, the notification must be submitted 30 days before the operation begins or the existing permit expires. Any existing facility not in compliance with the requirements of this amended rule shall, by December 1, 1992, submit a new Notice of Intent, which demonstrates how the facility will comply.

(3) The notice of intent to use the general permit to treat petroleum contaminated soils at a soil thermal treatment facility shall bear the signature, date and seal of a professional engineer licensed in the State of Florida and the signature of the facility owner or operator.

(4) Soil thermal treatment facilities also must be permitted under Rule 17-2, F.A.C., prior to thermally treating contaminated soil.

(5) Soil thermal treatment facilities shall treat soils to the extent necessary to comply with the criteria for clean soil in accordance with Rule 17-775.400, F.A.C. Soil sampling and analysis shall be in accordance with Rule 17-775.410, F.A.C.

(6) For stationary soil thermal treatment facilities, the specific conditions in Rules 17-775.600 through 17-775.620, F.A.C., shall apply. For mobile soil thermal treatment facilities, the specific conditions in Rule 17-775.700 and 17-775.710, F.A.C., shall apply.

(7) All soil thermal treatment facilities operating under a general permit shall maintain accurate records of operations. Operating report logs shall be maintained on a normal work day basis on Forms 17-775.900(2) and (3), F.A.C., and shall be maintained for a period of three years at the facility for a stationary facility, or, at an approved location for mobile facility. The Department shall have complete access to all records, field and laboratory chain-of-custody records, quality control records, raw data records, calibration records, and laboratory analyses.

(8) When treating petroleum contaminated soil, soil thermal treatment facilities shall have a minimum soil retention time and a minimum operating soil temperature which provides treatment

to comply with the criteria in 17-775.400, F.A.C.

(9) Soil must be screened, or otherwise processed in order to prevent particles greater than two inch mesh (diameter) from entering the thermal treatment unit. Soil thermal treatment facilities are allowed to treat debris, other than soil, such as concrete, rocks, and wood.

(10) All sampling and analysis shall be conducted pursuant to Rule 17-160.300(7), F.A.C. Soil sampling procedures shall be in accordance with the Quality Assurance Standard Operating Procedures Manual for Soil Thermal Treatment Facilities. Analysis of soil samples shall be conducted by a laboratory with an approved Quality Assurance plan under Chapter 17-160, F.A.C.

17-775.400 Criteria for Clean Soil.

Treated soil must comply with the following cleanup levels to be classified as clean soil. Mixing of treated soils to achieve these standards is prohibited.

(1) Total Volatile Organic Aromatics shall not exceed 100 ug/kg (100 ppb) using the analysis identified in Rule 17-775.410(1)(a), F.A.C.,

(2) Total Recoverable Petroleum Hydrocarbons (TRPH) shall:

(a) not exceed 10 mg/kg (10 ppm) using the analysis identified in Rule 17-775.401(1)(b), F.A.C., or

(b) not exceed 50 mg/kg (50 ppm) using the analysis identified in Rule 17-775.410(1)(b), F.A.C., provided the total of the Polynuclear Aromatic Hydrocarbons (PAH) does not exceed 1 mg/kg (1 ppm) using the analysis identified in Rule 17-775.410(1)(c), F.A.C., and the total of the Volatile Organic Halocarbons (VOH) does not exceed 50 ug/kg (50 ppb) using the analysis identified in Rule 17-775.410(1)(d), F.A.C.,

(3) Metals shall not exceed the following concentrations in Table I using the analyses identified in Rule 17-775.410(1)(e), F.A.C. The appropriate preparation methods identified in Rule 17-775.410(2), F.A.C., shall be used prior to metal analysis.

(a) Total Volatile Organic Aromatics (VOA)

(b) Total Recoverable Petroleum Hydrocarbons	EPA Draft Method 3540/9073
(c) Polynuclear Aromatic Hydrocarbons (PAH)	EPA Method 8100, 8250, 8270, or 8310
(d) Volatile Organic Halocarbons (VOH)	EPA Method 5030/8021 or 5030/8010
(e) Total Organic Halides	EPA Method 5050/9056, 5050/9252, 5050/9253
(f) Metals	EPA Method 7060, 7061 or 6010
Arsenic	EPA Method 7080, 7081 or 6010
Barium	EPA Method 7130, 7131 or 6010
Cadmium	EPA Method 7190, 7191 or 6010
Chromium	EPA Method 7420, 7421 or 6010
Lead	EPA Method 7471
Mercury	EPA Method 7740, 7741 or 6010
Selenium	EPA Method 7760, 7761 or 6010
Silver	

TABLE I

Metals	Maximum Concentration	
	TCLP *	Total
	(mg/l)	(mg/kg)
Arsenic	5.0	10
Barium	100.0	4940
Cadmium	1.0	37
Chromium	5.0	50
Lead	5.0	108
Mercury	0.2	23
Selenium	1.0	389
Silver	5.0	353

* TCLP = Toxicity Characteristic Leaching Procedure

(4) Under no circumstances may soils which exhibit the characteristic of toxicity for metals (EPA HW No. D004-D011) as established in 40 CFR 261.24 be blended. However, blending of soils prior to treatment to achieve the total metals criteria in Rule 17-775.400(3), F.A.C., is allowed if the pre-blended soil does not exhibit the characteristic of toxicity for those metals. Records shall be maintained of blending procedures used to comply with the total metals standards. Either records of blending ratios with calculations to estimate total metals concentrations of blended soil or resampling and analysis of blended pretreatment soil are acceptable. Uncontaminated soil shall not be used for blending.

(5) Soil which exhibits the hazardous characteristic of toxicity must be treated or disposed of at an approved hazardous waste treatment/disposal facility.

17-775.410 Soil Sampling and Analysis.

(1) Soil samples shall be analyzed for the following parameters using the test methods indicated:

EPA Method 5030/8021 or 5030/8020

als shall not be required if total metals analyses do not indicate the potential for toxic leachate concentrations. Soil contaminated with used oil, hydraulic oil, or mineral oil may be a hazardous waste and should be tested using toxicity characteristic, for total organic halides. Excavated soil which is classified as a hazardous waste must be managed as a hazardous waste and treated or disposed of at an approved hazardous waste treatment/disposal facility.

(2) The acid digestion procedure by EPA Method 3050 shall be used to prepare soil samples for total metal analyses except mercury, and the extraction procedure by EPA Method 1311 TCLP shall be used to determine leachability characteristic of metals.

(3) Pretreatment soil shall be analyzed for Volatile Organic Aromatics, Total Recoverable Petroleum Hydrocarbons, Volatile Organic Halocarbons and total metals. The number of composite soil samples for each contamination site shall be in accordance with Table II. Each composite soil sample shall consist of soil samples taken from at least four locations. Each sample shall be collected from locations equally distributed throughout the soil surface area and from a depth of at least six inches below the surface. Sampling procedures are described in the Standard Operating Procedures Manual for Soil Thermal Treatment Facilities.

TABLE II
Amount of Soil

by Volume (cubic yards)	by Weight (tons)	Quantity of Composite Samples
Less than 100	Less than 140	1
100 to 500	140 to 700	3
500 to 1000	700 to 1400	5
For each additional 500	For each additional 700	1

(4) The soil must not be thermally treated pursuant to this Chapter if it is classified as a hazardous waste. If any soil is suspected of containing a hazardous waste, then screening analyses for other contaminants may include, but are not limited to the following: volatile organic halogens; corrosivity; reactivity; toxicity characteristic constituents by the TCLP, which includes metals, pesticides and additional organics. TCLP analysis for met-

(5) Following thermal treatment, a soil sample shall be collected at least hourly and composited over an eight operational hour maximum time interval or at least once every 400 tons, whichever is less. Each composite sample shall be analyzed for the parameters identified in Rule 17-775.400(1), (2)(a), and (3), F.A.C. If the clean soil criterion in Rule 17-775.400(2)(a), F.A.C., is exceeded, the soil may be analyzed for PAH and VOH parameters identified in Rule 17-775.400(2)(b), F.A.C.

(6) Soil contaminated with used oil, hydraulic oil, or mineral oil may contain polychlorinated biphenyls (PCB). Such soil containing PCBs shall not be thermally treated at a mobile soil thermal treatment facility. Further, such soil containing PCBs shall not be thermally treated pursuant to this chapter at a stationary soil thermal treatment facility unless each of the following conditions are met:

(a) Soil contaminated with used oil, hydraulic oil, or mineral oil shall be analyzed by EPA Method 3550/3665/8080 for PCB concentrations. Soil PCB concentrations must be equal to or less than 10 ppm in accordance with cleanup requirements described in 40 CFR, Part 761, Subpart G (Spills Cleanup Policy). Such soil shall not be blended, mixed or diluted to meet this specification.

(b) If the analytical results obtained pursuant to paragraph (a) above are equal to or greater than 20 ppb, a sample of the used oil, hydraulic oil, or mineral oil must be obtained by the generator of such material and analyzed using the same EPA methodology referenced above. The used oil, hydraulic oil, or mineral oil must be shown to have a PCB concentration of less than 50 ppm in accordance with the criteria for non-PCB oil and excluded products defined in 40 CFR, Section 761.3. If a sample of the used oil, hydraulic oil, or

mineral oil is not available, a previous record of laboratory data and analytical results may be utilized to show the PCB concentration in the used oil, hydraulic oil, or mineral oil.

(c) The generator of soil contaminated with used oil, hydraulic oil, or mineral oil containing PCBs shall maintain a copy of laboratory data and analytical results obtained pursuant to paragraphs (a) and (b) above confirming that the concentrations specified in such paragraphs are met. The generator shall maintain such records for a period of three years which shall be available for inspection upon request of the Department.

(d) The owner or operator of the soil thermal treatment facility shall ensure that any contaminated soil containing PCBs no greater than the concentrations specified in paragraph (a) above, is recycled or reused after treatment, into a finished product line, or disposed of at a permitted, lined landfill. Finished product lines which shall meet this requirement are cement, concrete, and asphalt cement.

(e) The owner or operator of the soil thermal treatment facility shall maintain records demonstrating that any contaminated soil containing PCBs which has been treated by such facility has been recycled or reused after treatment into a finished product line or disposed of at a permitted, lined landfill as specified in paragraph (d) above. Such records should be prepared at the time such treated soil is recycled or reused or disposed of in an approved landfill after treatment. The owner or operator shall maintain such records for a period of three years which shall be available for inspection upon request of the Department.

(f) Soils containing PCBs meeting the specifications of Chapter 17-775, F.A.C., may be treated in a soil thermal treatment facility if the air permit for the facility, issued pursuant to Chapter 17-296, F.A.C., allows the facility to treat soil containing PCBs.

**17-775.500 Approval of Alternate
Procedures.**

(1) The owner or operator of a facility subject to the provisions of this Chapter may request in writing a determination from the Department that any requirement of this Chapter should not apply to such facility, and shall request approval of alternate procedures.

- (2) The request shall set forth at a minimum the following information:

(a) The facility for which an exception is sought;

(b) The specific provision of Rule 17-775, F.A.C., from which an exception is sought;

(c) The basis for the exception;

(d) The alternate procedure or requirement for which approval is sought and a demonstration that the alternate procedure or requirement provides a substantially equivalent degree of protection for the lands, surface waters, or ground waters of the state as the established requirement; and

(e) A demonstration that the alternate procedure or requirement is at least as effective as the established procedure or requirement.

(3) The Secretary or the Secretary's designee shall approve or deny each alternate procedure using the criteria in subsection (2) and shall provide written notice of such action.

PART II SPECIFIC CONDITIONS FOR STATIONARY FACILITIES

17-775.600 Security. All stationary thermal treatment facilities shall take appropriate measures to assure protection of the general public.

17-775.610 Ground Water Monitoring.

(1) A ground water monitoring program, to provide assurances that ground water quality is maintained, shall be developed for each stationary facility.

(2) A ground water monitoring plan shall be provided to the Department as an

- (a) Volatile Organic Aromatics

 - Benzene EPA Method 602, 5030/8020, or 5030/8021
 - Toluene EPA Method 602, 5030/8020, or 5030/8021
 - Ethylbenzene EPA Method 602, 5030/8020, or 5030/8021
 - Toxic Xylenes EPA Method 602, 5030/8020, or 5030/8021

(b) Methyl Tert-Butyl Ether (MTBE) EPA Method 602, 5030/8020, or 5030/8021

(c) Polynuclear Aromatic Hydrocarbons EPA Method 610, 625, 8100, 8310, 8250 or 8270

(d) Metals*

 - Arsenic EPA Method 206.2, 206.3, 7060 or 7061

* The most sensitive analytical method of those methods listed above shall be used if the metal(s) of interest is not detected in natural background levels. An annual summary of ground water monitoring data shall be submitted to the Department's district office on the date the general permit notice of intent was submitted to the Department.

FLORIDA SOIL TREATMENT FACILITIES RULES

2. Barium	EPA Method 200.7, 208.1, 208.2, 3010/6010, 3010/7080 or 3020/7081
3. Cadmium	EPA Method 200.7, 213.1, 213.2, 3010/6010, 3010/7130 or 3020/7131
4. Chromium	EPA Method 200.7, 218.2, 3010/6010, or 3020/7191
5. Lead	EPA Method 239.2 or 3020/7421
6. Mercury	EPA Method 245.1, or 7470
7. Selenium	EPA Method 270.2, 270.3, 7740 or 7741
8. Silver	EPA Method 200.7, 271.1, 271.2, 6010, 7760 or 7761

(5) If sampling analyses indicate any levels of the above parameters exceed the unaffected natural background levels, the permittee shall notify the Department in writing within seven days of receiving analytical results.

17-775.620 Receiving, Handling, and Stockpiling.

(1) Each batch of contaminated soil shall be clearly identified by source and stockpiled separately until all sampling and analyses in accordance with Rule 17-775.410, F.A.C., are complete. Unless pretreatment soil samples are taken at the contamination site, a stockpile identification system shall be used which is consistent with the sample numbering system described in the Quality Assurance Standard Operating Procedures Manual for Soil Thermal Treatment Facilities. Once the contaminated soil is determined to be acceptable for treatment, soil batches may be mixed with other soil batches found acceptable for thermal treatment. All contaminated soils shall be stored separately and apart from all treated soils.

(2) Contaminated soil shall be stored pursuant to this Chapter in such a manner to prevent contact with rainfall or release of leachate to ground water or surface water. The following pre-treatment storage measures shall be provided at each facility:

(a) All soil shall be stored under a permanent cover structure designed and constructed to prevent rainfall to either directly or indirectly come into contact with the stockpiled soil.

(b) The soil shall be stored on a permanent floor designed and constructed to prevent seepage, which will maintain a maximum hydraulic conductivity of no more than 10^{-7} cm/sec through a mini-

mum of four inches.

1. Plastic or synthetic liners as flooring shall not be considered as suitable alternates.

2. The floor structure shall be designed and constructed for leachate collection and control. A record keeping system shall be provided to record quantity of leachate collected and means of treatment or disposal.

(3) A covered structure and surface seal shall be provided as described in Rule 17-775.620(2)(b), F.A.C., to prevent soil or ground water contamination during crushing, screening, off loading, or other handling. If these areas are cleared of contaminated soil daily, surface sealing as described in Rule 17-775.620(2)(b), F.A.C., shall be provided.

(4) No leachate shall be discharged to soils, ground water, or surface water prior to treatment. Prior to discharge, treated leachate shall meet the standards established in Rule 17-3, F.A.C. Applicable permits for discharges to either surface water or ground water must be obtained prior to any discharge.

(5) Leachate may be treated in the thermal treatment facility.

(6) Until soil analyses have verified that the soil meets the clean soil criteria identified in Rule 17-775.400, F.A.C., treated soil shall be stockpiled on a permanent floor structure, which meets the criteria in Rule 17-775.620(2)(b).

(7) The maximum quantity of untreated soil stored at a thermal treatment facility shall be limited to 90 days treatment capacity based on the facility rated capacity stated in the Notice of Intent, Form 17-775.900(1).

PART III SPECIFIC CONDITIONS FOR MOBILE FACILITIES

17-775.700 Notices and Security.

(1) Any mobile thermal treatment facility which intends to treat contaminated soil, shall notify the following entities by registered mail at least three days prior to initiating operation at a contaminant site:

(a) The local City and County governments and local environmental agency, and

(b) The appropriate District Office of the Department.

(2) Any permitted mobile thermal treatment facility shall take appropriate measures to assure protection of the general public including the following:

(a) A security fence shall surround all areas where contaminated soil is being processed, including stockpiling, handling and burning areas. The fence shall extend at least six feet above ground surface. In lieu of a security fence, surveillance personnel on site at all times is an acceptable alternative.

(b) Gate accesses shall be locked when no attendant is present.

(c) Appropriate warning notices shall be clearly posted.

17-775.710 Excavating, Handling, and Stockpiling.

(1) Mobile facilities shall operate only at sites with confirmed contaminated soils and may treat only soil native to the site.

(2) Soil which is excavated shall remain on-site and within the area of suspected ground water contamination until soil has been treated, and cleanup levels identified in Rule 17-775.400, F.A.C., have been confirmed.

(3) Excavated soil shall be stockpiled on an impermeable surface or a liner with a minimum thickness of five mils. The stockpile shall be covered by a secured plastic cover with a minimum thickness of five mils until treatment in the thermal treatment unit commences.

(4) To the greatest extent possible, soil treated by mobile facilities shall be returned to the original excavation pit.

(5) The stockpile area for untreated soil shall be graded to direct leachate flow to return to the original excavation pit.

PART IV SOIL THERMAL TREATMENT FACILITY FORMS

17-775.900 Forms. The forms and instructions used by the Department in the general permitting of soil thermal treatment facilities are adopted and incorporated by reference in this section. The forms

are listed by rule number, which is also the form number, and with the subject title and effective date. Copies of forms may be obtained by writing to the Director, Division of Waste Management, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) Notice of Intent to Use the General Permit to Construct/Operate a Soil Thermal Treatment Facility, 1990.

(2) Untreated Soil Reporting Form, 1992.

(3) Treated Soil Reporting Form, 1990.